Vol. X. OCTOBER, 1869. No. 10.

CHICAGO

Medical Examiner,

EDITED BY

N. S. DAVIS, M.D.

TERMS, $3.00 PER ANNUM, IN ADVANCE.

CONTENTS:

CHICAGO:
ROBERT FERGUS' SONS, PRINTERS,
12 & 14 CLARK STREET.
1869.

THE

CHICAGO MEDICAL EXAMINER.

N. S. DAVIS, M.D., EDITOR.

VOL. X. OCTOBER, 1869. NO. 10.

Original Contributions.

ARTICLE XXXV.

ILEITIS. A CASE.

BY S. P. BREED, M.D., of Princeton, Ill.

Master Charles E. Newell, aged 16 years, compositor, of temperate and studious habits, after complaining for several hours, sent for me on the 10th of July, ult., to see him.

Found him with some fever, which had been preceded by a chill. Pulse 80, moderately full and strong. His greatest complaint, however, was *pain* in the *bowels*, somewhat paroxysmal, though never quite easy. The bowels were very little distended, elastic, and rather harder to the feel than natural, with tenderness on pressure. The tongue was moist and slightly covered with a *dark*, slimy coating.

On inquiring whether he had eaten any cherries (as it was in the cherry season), he said that *he had.*

He also stated that there had been no motion from the bowels for 24 hours.

I concluded, from the symptoms and history of the case, that there had been imprudence in diet; and, as he had vomited freely, and his stomach, therefore, pretty well emptied, I ordered the following:—

℞. Hydrarg. Chlor. Mitis,---------- grs. xx.
Ex. Colocy. Comp.,---------- grs. xx.
Morphia Sulph., ---------- grs. j.

M. F't pulv., No. 5.

Sig. One every three hours.

Hop fomentations to the abdomen, and enemata of starch and laudanum.

℞. Tinct. Opii, ---------- fl ℥ss.
Mucilago Amyli,---------- fl ℥ij.

M. F't enema. Repeat every three hours, if retained, until he sleeps.

July 11th. Physic not operated. Vomited after each powder, except one or two. Injections generally retained. Abdomen much the same; uniform tenderness over the whole abdominal region. Distention moderate, but *general.* No tumor in ileo-cæcal region. Could trace the pain to no local point of starting. Pulse 90. Some delirium during sleep. Had rested pretty well. Symptoms much as yesterday, in all other respects. Ordered the following:—

℞. Hydrarg. Chlor. Mitis,---------- grs. xx.
Ipecac, ---------- grs. j.
Morphia Sulph.,---------- grs. ij.

M. F't pulv., No. 10.

Sig. One every three hours.

Enemata and fomentations continued.

July 12th. Physic not operated. Injections mostly returned unstained. Urine free, but not remarkably high colored. The vomiting persistent, decidedly bilious, and very dark. Pulse 98, soft, *rapid*, and undulating: artery large, and circulation languid. Copious perspiration, especially during sleep, which stood in bead-like drops on his forehead and face. Tenderness of the abdomen much the same. Not much distention, though quite uniform. No flatus or meteorism. On applying the ear to the abdomen no *sound was heard*, no gurgling; but, on the contrary, a dead silence prevailed throughout the whole abdominal region. It was now observed, also that, during the

efforts at vomiting, the abdominal muscles did not coöperate with the thoracic and intercostal, but that they seemed utterly to refuse to act, which made his efforts to vomit peculiarly distressing. During the evening, the matter ejected by vomiting became of a grass-green color, and very acid, for which he took the following mixture:—

℞. Soda Bi-carb., ---------- ℥ij.
Morphia Sulph., ---------- grs. iij.
Aqua Mentha, ---------- fl ℥iv.

M. F't sol. sig. One teaspoonful every two or three hours.

During the colliquative sweating, he took the following:—

℞. Quinia Sulph., ---------- grs. x.
Syr. Rhei. Arom., ---------- fl ℥j.

Sig. Teaspoonful every two hours.

At this stage of the case, I omitted the mercurial, under the impression that it tended greatly to the prostration of the patient, while I could see no benefits from its use, as desired. Until now, I had contented myself with opiates, fomentations, together with mercurials, hoping by these means to overcome the difficulty, by first *subduing* the *inflammation*, *which* I *thought* to be the prime cause of the constipation. As the mercurials had no effect (probably from not being absorbed), and, as there was great solicitude on the part of his friends, because there was no operation, I ordered the following:—

℞. Senna Alex., ---------- ℥j.
Coriander, ---------- ℥j.
Aqua Fervent, ---------- 0j.

M. F't, infusum. sig. Half an ounce every hour. The bowels were now bathed with the following:—

℞. Sweet Oil, ---------- ℥ij.
Sp'ts Ammonia, ---------- ℥j.
Croton Oil, ---------- ℥ij.

M. F't liniment. sig. Apply to the bowels, and continued the fomentations, often renewed. Enemata with beef-tea added, continued at longer intervals.

July 13th. No operation yet. Vomiting continues. Senna-

tea thrown up. Countenance haggard. Expression anxious. Clothes quite wet with perspiration. Takes no nourishment, except the beef-tea in the enemata. Through this day he took ½ grain of morphia every two hours, and a dose of castor oil. His bowels were now bathed with hot oil of turpentine, and napkins wrung out of hot water were applied immediately, and this process repeated every half hour. Was called to the patient at 10 o'clock P.M. No operation; vomiting occasionally, matter ejected very dark; castor oil seen floating on the liquid. Has slept some. He now took 10 grains of calomel, with the hope that it would not be so easily rejected by the stomach, and might, therefore, be more likely to act as a physic than anything else that I could give. After waiting two or three hours, I determined to give an injection, sufficient to provoke an operation.

I thought of throwing this up high into the colon, through a bougie, but, as the injections had been generally retained, I felt sure that they had found their way up as high as I would be able to throw the fluid through the tube. Therefore, I omitted the tube, and injected some two quarts of soap, and tepid water, containing oil of turpentine and castor oil, well mixed together. This caused great pain, though he did not seem to realize where the pain was. When asked whether he did not desire to get up, he said, "Yes;" but when assisted to the sick chair, he made no efforts to procure an operation. No reflex action was called forth by the large enema, so as to induce straining; but, after sitting over the vessel some 10 or 15 minutes, part of the injection ran away, as clear as when thrown up.

I then order—

℞. Neutralizing Cordial, ---------- ℥ij.
Morphia Sulph.,---------- grs. ij.

M. Sig. A teaspoonful every two hours. A large blister over the abdomen, and an enema of beef-tea and laudanum, occasionally, as before.

July 14th. Was summoned to his bedside at 10 o'clock A.M., where I met Dr. G. W. Crossley, in consultation.

There was less sweating than yesterday. Vomiting had con-

tinued occasionally. Countenance anxious—very restless. Blister not drawn yet. Passed urine several times. Pulse 100. Artery large, and felt soft and undulating under the finger, against which the pulse dashed with a kind of wave-like impression, and was gone. Prostration evidently increasing.

The consultation resulted in the exhibition of the following:

℞. Hydrarg. Chlor. Mitis, ---------- grs. x.
Opium Pulvis,---------- grs. iv.

M. F't pulv., No. 4. Sig. One every three hours, with directions to interpose between each powder ¼th grain of acetate of morphia, until he was tranquilized. The vesicant was reapplied. Seen again at 4 o'clock. Blister drawn well. Three or four ounces of feculent matter had passed the bowels, the first that had passed during his sickness. Vomiting continues even more distressing. Matter gulped up, without much straining, nearly black. Hickups occasionally. Pulse 110, soft, feeble, and undulating.

July 14th. Vomiting still continues. Several small fecal stools. Other symptoms much the same. Evidently failing.

All medicine *per orem* discontinued. Half a grain of the acet. of morphia applied to the epigastrium, after removing the cuticle. Beef-tea and laudanum enemata continued, in small quantities, at short intervals, with the view of thereby contributing something to the support of the failing strength; hoping (forlornly) that these fecal passages might be a harbinger of something more favorable, and an index of a gradual subsidence of the inflammation, and a relief of the obstruction.

July 15th. Vomiting continues, and has become stercoraceous. Urine passed several times. Pulse 120, soft, undulating, and quite compressible. Countenance hippocratic. Patient very restless, somewhat delirious, though he answers questions correctly. No meteorism; no borborygmi during the sickness; bowels slightly tympanitic. No effort at straining when he had a passage; on the contrary, whatever was injected ran away involuntarily in the bed, generally very little stained or colored. All hopes of the case were now given up, and nothing more really important was attempted in the way of cure; but it may be

remarked that he took carbolic acid, properly diluted, with the view of correcting the fetor of the vomited matter, and it was also used freely in the utensils as a disinfectant, with much benefit.

The patient lingered on until 3 o'clock A.M., of the 16th, when he "passed that bourn whence no traveller returns."

This case had become one of great interest, from several considerations. The symptoms were so complicated that it was not possible to decide positively what the precise nature of the obstruction was. Moreover, only about two years before, Mrs. Newell had lost an older son, about the same age, with much the same symptoms.

This older son had the same obstinate constipation; all the symptoms of obstruction—stercoraceous vomiting, general tumefaction of the abdomen, tenderness, tympanitis, and the case, likewise terminated in death. He was treated, I understood, on the active cathartic non-mercurial plan, and finally was operated on by passing a bistoury into the abdomen, from which fecal matter issued through the wound. Before he died, however, (I was told) he passed fecal matter per *via naturales*. The history of the case had made a deep impression upon my mind; and when called to see Charles, I soon made up my mind that the chief difficulty proceeded, not so much from obstruction, as from inflammation in some portion of the alimentary canal; though I could discover no appearance of a tumor anywhere in the abdominal region, nor any accumulation of fecal or foreign matter, neither could I find, from the history, whether the pain had been at first local or not. Notwithstanding from a general survey of the whole case, the belief was strongly impressed upon my mind, from the absence of the *well-marked* symptoms of peritonitis, or from the superaddition of those that did not belong to peritonitis, that inflammation in the coats of the small intestines was the principal difficulty, and that this inflammation was to be met and subdued, not by *active cathartics*, but with *opiates*, *counter-irritants*, *revulsives*, and *mercurials*. Having thus made up my mind in regard to the pathology of the disease, and the proper mode to

pursue, and having followed it with such skill and ability as I could command, and having thus signally failed, as well as the advocates of the heroic cathartic plan had done before me, it became a matter of the deepest interest to me, to look into this somewhat obscure matter a little further. Hence, it will not be surprising that I felt much gratified when I was requested to make a *post mortem* examination of the case. Two persons in one family thus dying of the same disease, and *that* a somewhat obscure one, was sufficient to overcome any objection that they might otherwise have felt, and even make them anxious to know precisely what the difficulty was.

Accordingly, at 11 o'clock A.M., a few hours after death, I met Drs. Crossley, Latimer, and Winter, for that purpose. Before proceeding to the examination, however, a few minutes were spent in giving a brief history of the case, its symptoms, treatment, and reasons for the examination.

It was stated that the case was one somewhat peculiar, as the symptoms did not make the differential diagnosis fully clear. It could not be considered an open, plain case of enteritis, as usually understood, with the inflammation commencing in the mucous membrane of the bowels, and thence extending to the other coats, from the fact that there had been no diarrhœa, at any time during the illness of the patient; but, on the contrary, there was constipation all the time—obstruction. It does sometimes happen that obstinate constipation and all the symptoms of obstruction occur after an attack of diarrhœa or cholera morbus.

A case occuring in the practice of the speaker, several years before, was referred to, wherein all the symptoms of impassable stricture, *strangulation*, occurred, running on to a fatal termination; after what had been regarded at first by an intelligent physician as Asiatic cholera. In this case, the inflammation undoubtedly commenced in the mucous coat of the bowels, and thence extended by contiguity of tissue to the other coats. This was not the course of the disease, however, in this case.

Again, there were, it is true, prominent signs of peritonitis; but, then, these signs were not well pronounced, and unmixed.

There did not appear in this patient the small, frequent, and corded pulse, which are the usual accompaniments of peritonitis; but, on the contrary, the pulse was slow, soft, and unresisting. There was not, moreover, that amount of distention and tympanitis usual in peritonitis. No suppression of urine. The tenderness was not especially marked here, nor was the position that of peritonitis, the patient lying, as often as any way, on his side, with no disposition to flex the legs upon the abdomen. There were, however, *general* pain, moderate tumefaction, uniform over the whole abdomen, not traceable to any focus, from which the inflammation had radiated to other parts and tissues. These symptoms might lead us to suppose the case one of *peritonitis*, if we could forget the still more prominent facts of obstinate constipation, persistent and most distressing retching, and vomiting of bilious, acrid, and stercoraceous matters, all of which declare this case to be something more than peritonitis.

Another unusual symptom, in this case, is the remarkable torpor, stillness, and *dead silence* in the abdominal cavity. No rumbling, no flatus, no borborygmi, no gurgling sound, indicative of action of the small intestines, which usually occurs in mechanical obstruction, especially in that portion of the tube above the impediment. But, in this case, there was a fearful ominous silence, which is a mystery to be explained, if possible, by the examination.

Reference was made to the different forms of disease causing obstruction, which should engage the attention of the practitioner, whenever called to a case with such symptoms as point to obstruction; and he will run them over in his mind, one after another, and compare each with the one he has on hand, to see whether or not they agree. The first one, perhaps, that will be considered will be hernia. Having laid this over as not the one he has to treat, he next probably thinks of intus susception, intestinal concretions, volvulus, stricture from inflammatory adhesions, or thickening of the parietes of the bowels, and a consequent narrowing down of the caliber of the tube. Organized bands thrown across the passage. Such bands probably originate in an inflammatory adhesion of the surfaces of the

mucous membrane, in consequence of the effusion of coagulable lymph, and a subsequent separation of these surfaces before the lymph becomes consolidated, so that it is drawn out into apparently interlacing cords. Twisting of the bowels, so that a loop of the small intestine gets turned around upon itself, is another cause of fatal obstruction. This occurs sometimes from injuries, colic, etc. Still another cause of obstruction is strangulation, by the passage of a loop of the bowel through some abdominal opening, as, for example, through a rent in the mesocolon. Organized tumors are also sometimes found exterior to to the bowels, which, by pressure upon them, so diminish the caliber of the passage as to produce the obstruction. These are some of the principal causes which may produce obstruction; and although it may not be apparent in all cases, during life, as to which one, if any, of these causes occur in any particular case, yet, it is believed, that in most cases a careful investigation of all the symptoms, together with the whole history, will enable the physician to make out a pretty correct opinion. But, in the case before us, it was remarked, that a decided opinion could not be formed as to which one, if any, of the above classes it belonged. Hence the necessity for the examination.

On opening the abdomen, which was moderately distended, the peritoneum was found to be thickened, softened, and its bloodvessels enlarged, of a very dark color, but no effusion into its cavity. The small intestines (especially the jejunum) were nearly empty, *though not collapsed*, but generally discolored, from the effects of the previous inflammation, with extensive adhesions agglutinating them together in various places, and in abnormal positions.

The muscular coat of the small intestines, and more especially that in the region of the illeo-cæcal valve, was very dark, thickened, softened, and nearly in a state of sphacelus.

The mucous coat here was also thickened, softened, of an ash color, and thrown into rugous bands encircling the intestine, between which there seemed to be a solution of continuity, through which the sub-mucous and muscular tissues could plainly be seen, of a deep purple color. See specimen.

Stomach not opened, but its external appearance seemed healthy. And, as the intensity of the inflammation in the small, intestines increased as we passed down towards the lower portion, it was not thought necessary to examine the stomach further. Liver healthy. Gall-bladder moderately distended with healthy bile. The other organs examined were healthy.

There was no mechanical obstruction. No apparent impediment to the passage of the fecal matter, which was, moreover, soft and nearly fluid, and, therefore, altogether favorable to such passage. The bowels did not appear to be overdistended, at any point, with fecal, crude, or undigested matters. No impacted feces; no foreign substances lodged in any portion of canal, which could have produced the symptoms of obstruction. What then was the cause of the above symptoms? What was the pathology of the case? And what important practical lesson may be drawn from the facts before us?

It will be seen at once that this is a very interesting and instructive case. The difficulty was not found to be mechanical obstruction, from the retention in the bowels of any improper ingesta. Was it peritonitis? The symptoms did not pronounce it as such. Though there was peritonitis, there was, at the same time, *something more.* Was it enteritis? No, not simply enteritis, as usually defined in the books. It will be seen, therefore, that the symptoms and anatomical changes mark the case as *sui generis.*

It was not a case of obstruction from the effusion of lymph among the tissues of the intestinal walls; not intussusception volvulus; nor yet intestinal concretions of any kind. It was not a case of exantheme interne of the French, neither enteritis, nor yet typhlitis stercoralis, nor perityphlitis; as in these cases there would have been *at first pain* and *tumefaction* in the right hypochondrium, with a distinct hardness in this region, with, probably, symptoms of pressure upon the nerves, as they pass down to the right lower extremity, such as numbness, etc. These diseases are all excluded from the list, both by the symptoms and morbid anatomy in the case.

What, then, was the disease? This is the question. It was

inflammation of *all* the coats of the small intestines, extending nearly through the whole length of the jejunum, ileum, and cæcum.

Therefore, it may be declared that the obstinate constipation was the cause of the gastric irritability, by the operation of a well-known law of remote sympathy subsisting between distant portions of the alimentary tube. But what caused the constipation and symptoms of obstruction, it may be asked? Mucous inflammation? No. Peritoneal? No. We must look further than to the ordinary results of inflammation in these structures to find the explanation. What more have we left? The sub-mucous and the *muscular coats.* But these structures do not appear as distinct diseases in any of our learned works, on the diseases of the abdominal *viscera.*

It seems a little strange, when the importance of the function of the *muscular coat* is considered, that no distinct disease of this structure is described in our medical works. Can any one explain the reason for this hiatus? In the light of the pathology and symptomatology of this case, then, we will venture to *declare*, with much confidence, and, indeed, we would give *great emphasis* to the *fact*, that *inflammation* of the *muscular coat* of the small intestines is fully capable of producing *all* the *symptoms* of *obstruction*—strangulation. The implication of *this coat* is the cause of the superaddition of those symptoms which could not be accounted for otherwise.

The obstinate constipation, bilious, acrid, and even stercoraceous vomiting, it is believed, were, in this case, caused by the inflammation of the muscular coat of the bowels.

How did it do this? By arresting the function of the *muscular fibers* of the intestinal walls. *Inflammation* in these *circular fibers*, by suspending the normal molecular movements necessarily involved in their functional activity, and thus inevitably interfering with that sympathetic, consecutive, coördinate contraction of these fibers, which are the efficient, and, indeed, the only agents engaged in the propulsion of the alimentary mass through the intestinal tube, *will as surely* arrest the *vermicular motion* and *peristaltic action* of the *bowels* as any *concrete*

mechanical obstruction whatever, and will, therefore, give rise to all the symptoms of obstinate *constipation, physical obstruction,* and *impassable stricture.* This is the only hypothesis that fully explains all the foregoing group of symptoms. The dead silence; the significant, profound torpor of the small intestines can be accounted for in no other way. But it may be asked whether inflammation in these fibers is competent to produce this result? Let us see. When inflammation is set up, either in the peritoneal or mucous coat of the bowels, without extending into the muscular coat, we generally have diarrhœa. This diarrhœa is induced by an excitement of the excito-motory system of nerves, through reflex action. Thus, the muscular fiber is called into activity by the stimulus of a *contiguous inflammation,* and not from inflammation in its own tissue. It is a conservative remedial, and purely a physiological phenomenon, looking to the removal of the cause of the difficulty. But as soon as the *inflammation* extends into the substance of the *muscular tissue itself,* there will be, *not diarrhœa,* but *constipation instead.* I have already given one case, and I might give many more. It is, however, quite unnecessary, as all that is needed is simply to direct attention to the fact, and many instances illustrating this point will immediately spring to the mind. A muscle *inflamed* is not only indisposed, indeed, incompetent to act; but a forced action will be sure to increase the pain and aggravate the inflammation. If these statements are true, which, I doubt not, will be admitted, then this case becomes a most significant and important one to the medical philosopher, as it furnishes one more of the few cases recorded in the annals of medicine and pathology, to demonstrate the fact, that *inflammation* of the *muscular coat* of the bowels (which has been sadly overlooked) is fully competent to produce all the symptoms of strangulation.

The above is a good case in point to illustrate the practical bearings of this question. Had the case been regarded as one of mechanical obstruction, from the impaction in the canal of some foreign matter as the prime cause of the difficulty, and more vigorous measures employed, active cathartics brought

into requisition, it is *now* easy to see that such a course (which, it is feared, is too often pursued in similar cases) must have greatly aggravated the symptoms and diminished the chances of recovery. Let the practitioner carefully examine his cases of obstruction, and study well the differential diagnosis; and, if he have good reason to believe that the inflammation has its seat in the *muscular coat* of the bowels, either from the extension of peritonitis or enteritis, let him be careful how he tampers with active cathartics. On the contrary, let him put the bowels at rest; put them in splints, as it were, on the same principle that he would an injured limb; give them repose and time to recover; while, by the timely and judicious use of opiates, revulsions, *mercurial alteratives*, and other appropriate means, let him seek *first* to subdue the *inflammation* in these delicate tissues, so that they may be released from *restraint*, and *they* will *take care* of the *constipation.*

We have here, then, a notable case, where a considerable portion of the alimentary tube is so *paralyzed*, from the effects of *inflammation*, *involving all the coats* of the *bowels*, that all normal and physiological function is necessarily suspended between it, and the general system, responding to no medicines, awakened by no ordinary sympathies, controlled by a fatal synergy, bidding defiance to all available modes of treatment, and throwing a fearful spell, like some magic wand, over all the other functions and organs of the body, and drawing them with an irresistable power into its fatal toils. As we stand by and witness the progressive steps of this disease, as it advances unerringly to the very citadel of life, it requires no great stretch of fancy to imagine the system struggling in the iron grasp of some unseen antagonist, writhing in fearful agony, and straining every nerve to break the spell of the spoiler, and escape from his fatal meshes; but, like the fabled Prometheus, chained fast to the rock, while the vulture preyed continually on his liver, all efforts were unavailing; while the hidden foe "like a staunch murderer," steady to his purpose, redoubling his exertions, casts still further his mortal coils around his helpless victim, tightens more firmly his determined grasp, until one after another of the

struggling, quivering members are bound firmly, and fast, *pinioned*, "as with hooks of steel," beyond the possibility of escape; so that, further resistance being impossible, the only alternative left is a tame submission to the irresistible power of a hopeless destiny.

We can *now* understand *why* there was no *movement* of the *bowels*, no sign of *action* or *life*. Why that *dread* silence and awful stillness prevailed in the abdominal cavity, when all other organs were strained up to their utmost tension.

A fearful *inflammation*, *sudden*, *insidious*, and *destructive*, had seized, as with the hand of some etherial Titan, upon this portion of the body, arresting at once all the normal actions therein—muscular contractility destroyed, absorption through the thickened membrane stayed, molecular movements obliterated, and the nutritive function held in abeyance, until all the vital forces are brought to a dead lock, or converted into so many fierce enemies to human life and mortal flesh, to rankle and riot in their delectable work of destruction, disease, and death.

Such is the fate of all flesh.

ARTICLE XXXVI.

MILITARY SURGERY IN THE FRENCH ARMY.

By E. ANDREWS, M.D., Prof. of Principles and Practice of Surgery, Chicago Medical College.

The French Surgeons are much exercised at present over the enormous mortality of their military surgery, as compared with that of the English and Americans.

Last year, the *Gazette Hebdomadaire* published articles setting forth the frightful figures connected with the French surgery in the Crimean War. This year, Mons. le Dr. J. C. Chenu has published a work, in two large quarto volumes, with a folio atlas, on the surgical results of the last French campaign in Italy, at the time Napoleon III. expelled the Austrians from Lombardy. Notwithstanding that Northern Italy has a fine

climate, lies close to the borders of France, and abounds in everything necessary for wounded men, the same frightful excess of mortality in French surgery is displayed, which was before seen in the Crimea. The following table illustrates the differences between the different armies:—

OPERATIONS.	U. S. Army, War of Secession.	English Army, Crimean War.	FRENCH ARMY.	
			Crimean War.	Italian War.
Disarticulation of Shoulder,.....	39.2	33.3	61.7	52.7
Amputation of Arm, ...	21.2	24.5	55.5	55.8
Amputation of Forearm, ...	16.5	5.0	45.2	42.8
Disarticulation at Hip-joint, ...	85.7	100.0	100.0	57.1
Amputation of Thigh, ...	64.4	64.0	91.8	76.4
Amputation at Knee, ...	55.1	57.1	91.3	75.0
Amputation of Leg, ...	26.0	35.6	71.9	66.5
	40.2	33.9	72.8	63.9

PER CENT. OF MORTALITY.

From this, it appears that the mortality after French military amputation has been about 60 per cent. greater than in the American army, and nearly one hundred per cent. greater than in the British. The *Gazette Hebdomadaire* takes up the controversy, and attributes this disastrous result to two main causes:—1st. The organization of the army which makes the surgeons dependent on the *Intendant* (a sort of Quartermaster) for supplies; in consequence of which the wounded were often short of good rations, and, 2d. The reckless transfer of patients from one hospital to another. It does not seem to me that the writer in the *Hebdomadaire* makes his points well. In the U. S. Armies, the Medical Department was absolutely dependant on the Quartermaster and Commissary for supplies, and partly so for transportation. All branches of the service are in the same condition in that respect, and, in the nature of the case, must be. In the turmoil of war, rations will get stopped or damaged occasionally; and yet we did not find that short or even damaged rations were half as injurious to the wounded as some other things to be presently mentioned. A similar criticism may be made respecting the assertion, that the transfer from hospital to hospital was necessarily a chief cause of mortality, and a reason why their men suffered more than ours.

No doubt, transportation injures some patients, but when done in open, airy, and not crowded conveyances, it does much less harm than we formerly supposed. On Sherman's march to the sea, the wounded were all carried through to Savanna in ambulances, shaking and jolting over bad roads, and yet the amputations recovered magnificently. No set of wounded men ever did better, evidently because they had the freshest of pure air. In active military operations, the hospitals near the front must often be abandoned and the patients transferred; besides, they become overcrowded, and require relief for that reason, otherwise, half the patients will die of typhus, erysipelas, hospital gangrene, and pyæmia. I believe that we had in our army more such transfers than the French, and yet we suffered less mortality, by 60 per cent. It is not difficult for an observant military surgeon to conjecture the true cause of the French ill success. There is but one thing which can produce so many deaths after amputations as M. Chenu describes, and that is overcrowding, or what amounts to the same thing, foul air and bad ventilation. Overcrowding, and consequent foul air, means putrefaction, erysipelas, hospital gangrene, pyæmia, and death. When surgeons lose 55 per cent. of their amputations of the arm, and seventy per cent. of their amputations below the knee, we know very well what that means. It is of no use to accuse the short rations, mouldy "hard tack," or rough transportation; such men have assuredly been overcrowded or under-ventilated. They have breathed the effluvium of each other's wounds, until their whole systems were permeated with the germs of putrefaction, and were ready to succumb to every operation, however slight. American surgeons tried that out on the large scale early in the war, but, fortunately, they had sense enough to learn from experience, and not to perpetuate their early blunders.

I have no doubt that the following is a true account of the matter. Frenchmen have very little comprehension of the amount of fresh air which wounded men require. Even Velpeau, that old giant of French surgery, was a wretched sinner against science in this respect. I well recollect walking the

rounds of his hospital with him, and noticing that his wards literally stank with foul air. I was not at all surprised to notice in his hospital reports, that in the winter season (when windows are shut, and fresh air almost excluded) he had a regular annual epidemic of malignant erysipelas. When the men, field-officers, and surgeons of an army are alike destitute of any idea of the danger of ill-ventilation, death will reap a harvest out of their ranks. The plains of Lombardy are full of village and buildings of every description, erected for anything else but ventilation. I presume the wounded were crowded into these buildings, in the first place, as the nearest solid shelter. There they got their first poisoning. Then they were sent in ill-ventilated, crowded cars, by rail, to Genoa, and absorbed their second course of putrefacient germs. At Genoa, they were placed into, close, sea-going vessels, which are the most deadly and unventilable machines ever contrived for the destruction of wounded men, and taken a voyage to Marseilles, and thus drank their third course of putridity. If any of them did not die by this time, it was because they were proof against all ordinary causes of destruction. I presume that this, or something like it, was the true surgical history of the Italian campaign of Napoleon III. If the French surgeons, in their next war, will see to it that every wounded man, from the hour of battle to the day of his recovery or decease, breathes no air but that which is as fresh and pure as that in the sky, they will find that their statistics of amputations will compare favorably with those of any nation.

ARTICLE XXXVII.

BACKWARD CURVATURE OF THE SPINE.

ITS PATHOLOGY AND TREATMENT.

By J. S. SHERMAN, M.D., Lecturer on Orthopœdic Surgery in the Chicago Medical College.

The neglect of surgical authors treating of diseases of the spine, must be plainly visible to any one examining the subject from the text-books of the present day, and much more evident in those of older authority.

A few general remarks on their appearance, cause, and treatment is all the information given, and the practitioners with a case under his observation, turns from the books with little or no idea as to the best course to pursue with his patient. An apparatus of some kind is recommended, which lifts from the axilla, to remove weight from the spine. Bringing pressure on the axillary nerves, where it cannot be tolerated by any child or adult. When we consider that the shoulders are freely moveable, upwards and downwards, to a very considerable extent, it is evident that they must be raised as high as the ears, before they begin to relieve any weight from the bodies of the vertebræ. Yet these concerns are often fastened upon the backs of patients, with the seeming idea, that there is something curative in the simple contact of them. The relief of pressure from the inflamed bones, is by no means accomplished. In addition to the mechanical treatment, the seaton and irritating applications, upon and in the neighborhood of the spine, are still advised. The origin is generally referred to scrofula or tuberculosis, and said to occur mostly in the children of the poor, and badly fed, being one of the diseases most frequently found in poverty and rags. From this doctrine and treatment, I think we have the best of reasons to dissent.

Those treating the disease most extensively, do not refer its origin to a deposit of tubercle. Nor do they most frequently meet with it among those deprived of the necessaries of life.

The strong and robust are as often its victims as the weak and sickly. Taylor claims that the former are more often its subjects.

Adams, one of the surgeons to the Royal Orthopœdic Hospital of London, told me that in his practice he had seen the disease as frequently in patients without the hospital as within.

My own observation coincides with that stated, and I have been able, in the majority of all cases, to trace the point of departure directly to an injury. It is not strange that the backs of children are injured by slight falls, or by twisting the spine. The cartilagenous attachments of the five centres of ossification in each vertebræ, become consolidated only in the adult. In early life an inflammation is easily awakened in this tissue by violence. I have recorded in this city three cases of the disease occurring in adults, all strong and healthy. The first: a man aged thirty years, by trade a painter, fell from a scaffold and was treated for a sprain of the back; he partially recovered and was again able to do light work. Four months after, a decided projection of the tenth dorsal vetebræ was noticed, with all the characteristics and symptoms of "Potts'" disease.

The second, a laborer, aged thirty-five, was injured by falling from a car. Three months after the injury, projection of the sixth and seventh dorsal vertebræ occurred.

The third, a physician, presented symptoms of inflammation of the vertebræ, six months after a slight injury of the back.

I cite these cases to show that the disease occurs from injury of the spine, in the adult as well as the child; that it excites an inflammation, simple in its character, at first involving the cartilages only, but in time producing the backward curvature.

The tubercular constitution is not necessary, and in a majority of cases neither exists, nor is it developed. We have to contend with a simple inflammation, but one occurring in structures surrounded by conditions which will not allow of spontaneous recovery. These conditions are, constant pressure and movement on the inflamed surfaces.

The treatment consists in relieving pressure and securing immobility. We are not able in the spine, as in the joints, to

make direct extension, but overcome pressure upon the bodies of the vertebræ, by supining the back and bringing the line of gravity through the articulating processes, which are not involved in inflammation. This is the object of all mechanical appliances and those are useless which do not accomplish it. Confining the patient to bed should be avoided as much as possible, as such a course impairs the general health.

Various forms of apparatus have been constructed by different surgeons. From experience in the use of all, I find none which so well fulfils the indications for treatment, as that figured in cut No. 1. This accomplishes its purpose so effectually, and is tolerated with such ease and comfort to the patient, that I have used no other for the last year.

In children it forms a support for the back, which they can wear night and day, and in which they can be carried about with ease and safety.

Often, in the early stages, the inflammation extends to the sheath of the spinal cord and is prolonged over the coverings of the nerves, deriving their origin from the diseased point. This frequently causes paralysis of the structures supplied by them. It always somewhat impairs their function. Pain, when present, is referred to the termination of these nerves. Disease in the cervical region impairs the power of speech, and sometimes the memory. In the dorsal, apparent gastric trouble and disturbance of respiration. In the lumbar region, pains in the bowels, with a diminution of control over the legs.

Occurring in any portion of the column, the patient makes an effort to supine the back and avoid any jar in walking. The positions which are taken show a desire to transfer the weight from the bodies to the articulating processes.

The diagnosis can generally be made from these symptoms *before* any projection is seen. It is important to recognize the condition early, as we may then prevent deformity, and restore to the patient a spine perfect in its symmetry.

After the disease has advanced to the loss of substance of the bodies and projection of the spinous processes, the diagnosis is no longer a matter of doubt, and we can then only hope

to save life and produce anchylosis of the vertebræ in their deformed position.

The restoration of lost bone does not occur.

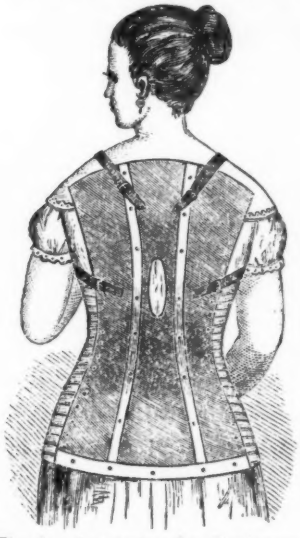

Fig. 1.—Apparatus for Backward Curvature of the Spine.

The mode of constructing the spinal support is as follows:

The patient is placed upon the abdomen, the chest and hips being supported by pillows, so that the back is supined. In this position a mould in plaster of Paris of the back, hips, and shoulders is taken. From this a cast is made which gives an exact model of the back, with the column supined. A piece of sole leather, soaked in water, until soft and pliable is lashed upon the cast, and remains until dry.

The front is completed with a corset and axillary straps. A few strips of steel are riveted to the backpiece to prevent its form changing. When adjusted the back is secured in the supined position, the bowels supported by the corset, and the line of gravity thrown through the articulating processes.

Absolute immobility is secured. The relief to the patient is decided and immediate. When the disease occurs in the upper cervical vertebræ, it is not so easy to remove pressure. In these cases the weight of the head must be *directly* removed from the inflamed bones.

We can here use the shoulders as a support for an apparatus. Those forms by which the head is secured with a chin and occipital strap, cannot be tolerated when sufficient tension is made on them to support the weight. The accuracy with which we can adapt leather to a cast, and the evenness with which it distributes the pressure when applied to the body, has led me to construct an apparatus for the relief of these cases, in the

same manner as for those occurring in other regions of the spine.

Figure 2, represents the instrument. A cast is taken, reaching from the shoulders as high as the mouth in front, the ears on the side, and the bulge of the occipital bone behind. Leather is then moulded upon this as in the construction of the first apparatus.

Fig. 2.—Apparatus for Potts' Disease in Cervical Region.

From either shoulder rises a rod upon which is cut a screw. The chin and occipital piece are divided laterally and the upper margin of each surrounded with a steel strip. The posterior half having upon each side a slot, into which the steel of the chinpiece slides, and is secured with a thumbscrew.

This allows us to easily apply the head piece, and to grasp with any amount of firmness. The screw rods, provided with a nut, pass through a ring attached to the steel band surrounding the headpiece.

By turning the nuts we are enabled to lift the entire weight of the head from the cervical vertebræ. The inner surface is lined with soft buck-skin, and no inconvenience is complained of by the patients wearing it.

TREATMENT OF ABSCESS.

When the inflammation has progressed to caries and suppuration, the abscess may point either in the groin or upon the back.

As soon as we are confident of its nature, the contents should be evacuated.

The controlling effect of carbolic acid over suppuration bids

fair to render the treatment of these abscesses much more satisfactory than formerly. A saturated solution of carbolic acid and water, should be injected daily, and the opening sealed with a pledget of cotton dipped in a solution of eight parts of either castor or linseed oil to one of the acid.

This destroys any germs which may have entered at the time of opening. The treatment must be effectually and diligently followed until the abscess heals. The pain and tenderness often rapidly subsides, and the apparatus can be worn and only removed when the abscess is injected.

The general health of the patient should be carefully supported. Fresh pure air is of great importance. The administration of iron, quinine, and the mineral acids will be found most useful.

The cure is always slow, and improvement follows only after weeks and months. Yet, by careful watching of these cases, I think the surgeon will be rewarded with as large a proportion of success as he meets with in the treatment of any other surgical disease.

81 Monroe Street.

ARTICLE XXXVIII.

MILITARY SURGERY AMONG THE APACHE INDIANS.

BY E. ANDREWS, M.D., Prof. of Principles and Practice of Surgery, Chicago Medical College.

The Apaches of New Mexico and Arizona are the most inveterate nomads, perhaps, in the world. They not only have no agriculture, but they despise even the chase. The only occupations they deem worthy of a man are stealing and fighting, the first being the most honorable. Like other Indians, they have their medicine men, and, from the necessities of their position, they have developed a set of ideas and system of practice in military surgery.

Incantations, and other modes of appeasing the unseen powers, constitute a large portion of the resources of the Apache military surgeons, but they are by no means altogether negligent of material appliances. Their prime idea is that the chief danger of a wound is from the loss of blood, a notion which must have been very near the truth in the days when they only received wounds from knives and arrows. They have no idea of a circulation of the blood, but suppose that each part of the body has its own permanent stock of that fluid; but they recognize that hemorrhage from the head, neck, and breast is more dangerous than that from the extremities. From this prime pathological idea, they have naturally made the deduction that the chief surgical aim should be to plug the wound, and thus put a stop to the hemorrhage. This pathology and treatment they doubtless established centuries ago, from observations upon the incised wounds made by arrows and knives, and being eminently conservative, they naturally apply the same notions and treatment to the gunshot wounds which they receive from the U. S. troops and white settlers.

The first care of the Apache medicine-man, is to have on the field of battle some fresh boughs of the ash, whose leaves are used in the dressings. Quite as important, also, is a quantity of the mescal root. The latter is a nutritious root, which is roasted and carried with them as food. When it is chewed and the nutritive part extracted, there remains in the mouth a wad of woody fibres, like a plug of coarse tow. The doctor first lays on the wound a fresh ash leaf; he then places on it a plug of the chewed mescal fibres, and thrusts the whole into the wound, a plan which in arrow wounds must often be very useful, but rarely of any benefit in gunshot injuries, as the latter seldom bleed. It would seem that they are not content to leave the tampon quietly in its place, but deem it important to change it frequently. After one of the battles in New Mexico, where some twenty or thirty savages were wounded, the U. S. surgeons found the Apache field hospital, and discovered in it about a bushel of the bloody mescal plugs, which had accumulated from their constant change of dressings. After this pro-

cess has been continued until they deem the danger of hemorrhage entirely over, the next step is to go deeper, for the first plugs were only pushed into the orifices of the wounds. They now fill the entire track of the arrow or bullet to its extremity, with a tampon which, they allow to remain a short time. Finally, they remove it, and complete the cure by the application of herbs externally. All this treatment is accompanied with a suitable amount of superstitious mummery.

During the past year, Mr. S. D. Phelps, a citizen of Chicago, accompanied the U. S. troops to an attack on one of the Apache villages, which was taken by surprise. In the rush, Mr. Phelps came in contact with the medicine-man, and shot him, and as a matter of course, captured his set of surgical instruments. They consisted of five stones and a sea-shell. The stones were carbonate of lime, and were cut out of pieces of beautiful stalagmite, from some cave or spring, the stone being handsomely striped with black and fawn-colored veins. Four of the stones apparently constituted a set of tamponers. The largest was about five inches long, cylindrical and slightly tapering, and was just about the right size to enter a wound made by an army musket-ball. The others were of successive sizes, smaller, and probably used in the same way on the wounds made by the very small stone arrow-heads, of the Apaches and other tribes of that region. The fifth stone is supposed to be a charm only. It represents in form the Texan armadilla, and the stone is ingeniously cut in such a way that the bands of color show stripes across the back like the rows of scales on the armor of the armadilla. The eyes of the animal are represented by pieces of mother of pearl, set into the stone. The sixth object was a sea-shell, perforated and suspended to the neck by a string. It was probably a charm. When the stones were shown to the squaws captured in the assault, the latter exhibited great emotion, and begged that they might be thrown away, otherwise they said not a single soldier would live to return to his camp.

Mr. Phelps has presented these relics to the Chicago Academy of Science, where they may be seen, with other ethnological curiosities, by those desirous to investigate such subjects.

Foreign Correspondence.

HEIDELBERG, *August 13, 1869.*

DEAR EXAMINER:—Being in Zurich a few days ago, I took occasion to visit the Canton's Hospital, which has about four hundred beds. I first attended the clinic of Prof. Horner, who has charge of the department of the eye, and saw some operations for cataract and the removal of pterygii. Prof H., though a comparatively young man, is a careful operator and instructive lecturer. Like most other operators on the eye whom I have seen in Austria and Germany, he ordinarily operates without an anæsthetic. What the comparative successes of eye operations with and without chloroform are, I am unable to say. I am not aware that there are statistics on the point; nevertheless, I have been led to believe from witnessing numerous operations, that if there were any difference in results, the more favorable they must be with the use of chloroform. I have seen many patients who were entirely powerless to hold the eye fixed on the approximation of the knife, consequently its point has had its entrance and exit far from the place intended, and once, through a sudden movement of the eye, came out through the centre of the cornea; and for the same reasons the iris and other structures of the eye are often mutilated, causing iritis, keratitis, etc., and often loss of the organ, apparently, at least, through unnecessary irritation, which in a great degree might have been avoided with chloroform.

I also noticed that Prof. Horner did not release his hold on the conjunctiva with the pincettes, or remove the speculum until the operation was entire, while others have told me that this mode of procedure was more or less dangerous, as the patient often brings so much pressure to bear as to rupture the capsule of the lens and cause the escape of more or less of the vitreous body, which does not so often happen if the pincettes are removed before the flap is completed. Although this is not an eye journal, Mr. Editor, yet as the general profession is be-

ginning more and more to look up these departments called specialties, I have inserted these observations as perhaps interesting questions. Prof. H. has about thirty eye patients in his wards, and five to twelve out patients, that visit his clinic at the hospital. His assistant gives a course on ophthalmoscopy from time to time, but the material is not very abundant. The number of eye students is also small.

I next visited the surgical clinic of Prof. Rose, who had many interesting cases. Prof. Rose is successor to Prof. Bilroth, of Vienna, and though a man of not so extensive and profound learning as Prof. B., yet is quite efficient for his position, and fills it with satisfaction to his students. The surgical class is small—perhaps thirty or more—and enjoys the best of advantages for witnessing operations, and its members are often permitted to perform many important ones. I made the morning visit with the Professor, and saw about eighty instructive cases. I was convinced that Zurich is a better place for surgery than Vienna. I think Prof. Billroth has confessed the fact since he went to Vienna. In Vienna, one sees a large number of ulcers, necroses, strumous tumors, etc., while in Zurich, one sees a larger number of fractures, amputations, and wounds. I saw a child, nine months old, that had prolapsus ani for six months. All forms of treatment had been fruitless. The Professor was using no carbolic acid in any of his cases, but preparations of zinc, potash, etc. Prof. Biermer gives a medical clinic five times a week. Prof. Gusserow gives an obstetric and gynäkologische clinic with touchirübungen four times a week; also, an operative midwife course three times a week. The number of births in the hospital, however, scarcely exceed two hundred a year, consequently this branch is practically better studied elsewhere.

I saw several female students from America, England, and Russia, at the clinics, who, on account of the moral salubrity of the city and the respect shown them by the students, find it an agreeable place to study. The whole number of medical students, I think, is less than a hundred.

In Lerne, I had the pleasure of meeting Prof. Jewell, who for

several semesters has ably filled the chair of anatomy in Chicago Medical College, and is now on a visit to this country and the East, for studies in philosophy, biblical history, etc. The Professor has already achieved a fair fame as a lecturer and writer on science and metaphysics, and is rapidly widening his reputation. May success attend him in his new field of labor.

The Heidelberg University has for generations been one of the most celebrated of Europe, and in many respects is still entitled to the appellation; yet larger hospitals have attracted students elsewhere, so that of the eight hundred or more students who resort here for learning, barely more than a hundred are students of medicine. The city has only about 17,000 inhabitants—hence its hospital wards cannot be very rich in material. There are, however, in the general hospital about one hundred and forty patients, and in the eye hospital thirty-five. Surgical students enjoy very good advantages here, as the number is small, and Prof. Simon allows them to perform nearly all the operations, as amputations, resections, etc. Prof. Moos gives courses on the ear of 6–8 weeks duration, and has a tolerable supply of patients. Prof. Becker has an ophthalmic clinic four times a week at the eye hospital, and has about six out patients daily. He also gives instruction in the use of the ophthalmoscope three times a week, for which patients come from the blind institute, in an adjacent town. The class also visit Mannheim, a city half an hour by rail distant, twice a week, to see cases. Above all, however, Heidelberg is to be recommended to the student of anatomy, chemistry, and physiology, for which he can enjoy ten-fold better opportunities than in Vienna, or many other larger schools. Profs. Bunsen, Helmholtz, Arnold, Nuhn, etc., who occupy these chairs, attract justly many admirers. Prof. Wundt gives a course of lectures on psychology, also on anthropology. Prof. Helmholz gives a course on the "general results of science," with especial reference to biology. I read awhile ago that Prof. Bunsen had lost his second eye by an explosion. Such is not the case. I am told he was but slightly injured, and has now entirely recovered.

Yours, truly, F.

Correspondence.

FORT WAYNE, IND., *August 25th, 1869.*

DR. N. S. DAVIS, *Chicago, Ill.:*

DEAR DOCTOR:—Having recently made use of carbolic acid for the destruction of maggots, inhabiting a locality which rendered their mechanical removal impracticable, with good results, and never having seen an account of the same application, I am moved to give an account of my experiment.

On the 4th inst., I was called to a case of *epithelial carcinoma*, in which the soft parts of the nose had been entirely destroyed by the insidious disease, which had also penetrated far into the nasal fossa, and rendered the poor sufferer an object of pitiful disgust by its terrible work; and now, as if this was not enough, she had fallen victim to the *fly*, and was verily *food for the worms while she yet lived.* The sight was indeed most sickening; for the left nasal fossa, laid open and gaping from the removal of the soft parts, *was completely filled with maggots*, of large size, some of them being half an inch in length, and all, with their accustomed activity reveling on human flesh. To add to the disgust, one would occasionally come wriggling out of the patient's mouth; and the left eye, the sight of which was gone, was also filled with these loathsome things; so that it would seem that the entire face was alive with them. Whether the nasal duct had been enlarged for their convenience, or whether they were of a separate deposit in the eye, I know not.

The patient was a Frenchwoman, about 50 years of age, and had been afflicted for a number of years; but this once being the only time I saw her, I can give no history of the case, and none is needed. At this time, she was greatly prostrated, and when undisturbed by attendants, she did not suffer much pain, and manifested but little consciousness, whereas, a day or two before the maggots were noticed, her suffering was intense. Now, the removal of these intruders by the usual means was rendered out of the question, by the extreme sensativeness of

every part of the patient's face, which forbade a touch even; and to make no effort for their removal, even though I knew her to be dying, would seem criminal to her friends. Consequently, I ordered an anodyne, to aid her in bearing the attempt, and for the destruction of the maggots; as a vermifuge, I ordered a solution of carbolic acid, 20 gr. to the ℥; to be applied greatly reduced at first, the strength to be increased as it could be borne. The result of this was eminently satisfactory; two or three applications not only destroying and removing every maggot, but also otherwise cleansing and purifying the foul sore in a remarkable degree, which was followed by general improvement, so that the patient rallied, partook again of nourishment, and for three or four days seemed a great deal better.

A word with regard to the use of carbolic acid, as a wash for indolent ulcers. A case of two years standing, very severe, at times threatening the patient's life, which had bade defiance to almost every thing—carbolic acid included, used very strong—is now yielding and healing kindly under a very weak application of the acid. Of a solution of 20 grs. to the ℥, only 15 or 20 drops are added to a teacupful of water, and this is applied twice a day.

P. G. KELSEY., M.D.

Selections.

MEDICAL SOCIETY OF COUNTY OF NEW YORK.

Stated Meeting, March 1st, 1869.

Dr. GEO. T. ELLIOT, Jr., President, in the Chair.

After transaction of the usual preliminary business, and the reading of the reports of committees, a paper was presented by Dr. F. D. Weisse, entitled "Lister's Antiseptic Treatment in Surgery." This paper is published in full in the *Medical Record*, and we therefore present only a summary thereof.

After stating the object of the paper, the author gave an historical sketch of the introduction of the antiseptic treatment

of wounds, accrediting Mr. Lister, of Glasgow, with the chief merit of originating and perfecting this system of treatment—although he had been anticipated by many in the use of carbolic acid, for its antiseptic qualities.

The mortality of surgical cases is generally due to one of *four* general causes:—

1. Shock from injury or operation.
2. Consecutive inflammation, with sequelæ of injuries and operations (profuse suppuration, pyæmia, etc.)
3. Heterologous formations (cancer, etc.)
4. Degenerations of tissue which destroy the integrity of organs, such as calcification and atheroma of the coats of arteries, leading to gangrene, aneurism, etc. The second of these general causes is the most prolific source of mortality in surgical practice.

The cause of all these disturbances in surgical cases is usually, in the opinion of Mr. Lister, the irritating and poisoning influence of decomposing blood or sloughs. The essential cause of suppuration in wounds is decomposition, brought about by the influence of the atmosphere upon blood or serum retained within them; and, in the case of contused wounds, upon portions of tissue destroyed by the violence of the injury.

Proof of this is obtained from the fact that, within 24 hours after the accident, the colored serum which oozes from wounds is already distinctly tainted with the odor of decomposition; and during the next two or three days, before suppuration has set in, the smell of the effused fluids becomes more and more offensive.

These putrid fluids may be absorbed, and so give rise to constitutional irritation—the term so generally employed to express the infection of the system from the absorption of poisonous materials.

Microscopical examination of the atmosphere shows conclusively that it contains innumerable germs of living bodies, and the varied experiments, by Pasteur and others, prove that to the presence of these germs in fluids decomposition is due. Prevent these germs absolutely from entering fluids, and no such thing as fermentation or decomposition can take place. Thus the old idea that putrefaction was effected by the oxygen of the atmosphere is exploded.

From this we know that the unhealthiness of crowded hospital wards is due principally to the presence of these germs in the atmosphere.

The claims of antiseptics in surgery are based upon the fact

that they have the power of destroying these germs, and thus rendering the air free from septic influence upon wounds.

The power of sulphurous acid in preventing and arresting fermentation and decomposition has long been an established fact. To Polli, of Milan, we owe its therapeutical application. The virtues of choloride of zinc have been advanced by Mr. Campbell de Morgan, of the Middlesex Hospital, London. The sulpho-carbolates of soda, etc., have, of late, been brought forward as more efficient than sulphurous acid preparations, by Mr. Arthur E. Sansom. Carbolic acid outrivals them all, however, as a general local application in surgical practice.

The advantages which Mr. Lister finds that carbolic acid possesses are:

"1. It is a most potent poison to the low forms of life which determine putrefaction, and it retains this power, even though diluted to such a degree as to be almost entirely unirritating to the tissues of the human body.

"2. It is volatile, and its vapor is quite efficacious as an antiseptic upon the air in the vicinity (of wounds).

"3. It is a local anæsthetic, and exercises a most soothing influence upon a painful wound.

"4. It is soluble in a variety of liquids of very different properties—and each of these solutions has its own special value in practice."

The preparations of carbolic acid which have been employed by Mr. Lister have been of various strengths, ranging from the pure acid (liquefied crystals) to a dilution in the proportion of one part of the acid to forty parts of a suitable solvent or vehicle. The glacial or crystalline form is used in all his preparations. (It is solid at ordinary temperatures, but melts readily when heated, or when a little water is added to the crystals.)

In his earlier cases of compound fractures, etc., Mr. Lister used the pure acid (deliquesced crystals); but he renounced it, because it induced too much unnecessary irritation, increasing discharge, and thus retarding cicatrization.

The materials used in the present system of treatment are liquid and solid preparations of carbolic acid, and pieces of block-tin, tin-foil, etc.

Liquid solutions: 1. In water; 2. In oils or glycerin; 3. Alcohol.

Solid preparations: Paste or putty; 2. Plasters; 3. Ligatures.

LIQUID SOLUTIONS.

1. In water: "Water dissolves but a small portion of the

acid, only 1-20th part of the pure crystals, and holds that small quantity very loosely, so as to permit it to act with energy on any substance for which it has stronger attractions, and also to become dissipated by exposure." It is applicable as a wash to the interior of recent wounds, whether the result of accident or operation.

2. Oily solutions. (Linseed and olive oil, glycerin.) "The fixed oils have so strong an affinity for the acid, that they will mix in any proportions with it, and hold it so firmly as not to permit it to act with much energy on the tissues, or to become dissipated into the atmosphere."

3. An *alcoholic solution* of one to four has been used. Alcohol readily dissolves the acid crystals, almost equal to the oils: but, like the watery solution, it holds it but loosely. For this latter reason it is applicable to the surface of wounds, etc., especially those that have been exposed for several hours after injury.

SOLID PREPARATIONS.

1. Paste or putty.

This is an oily application made to assume a solid form. Linseed-oil, four parts, carbolic acid (crystals), one part, enough common whitening to form a paste of the consistence of glazier's putty.

2. Plasters.

These are made with olive-oil, litharge, beeswax, and carbolic acid, one to ten, one to twenty, and one to forty. They are reliable, retaining their virtues for many hours. As an external dressing or guard, they shed the discharges freely, and keep all underneath antiseptic. They possess some disadvantages, and have more recently been superseded by what Mr. Lister calls the *antiseptic lac.*

It consists of shell-lac with which carbolic acid will mix in any amount by aid of heat; when mixed in right proportions it may be spread, when cool on calico. In this manner a large quantity of the antiseptic is stored up. It is not softened by the discharges. By brushing over the surface with a weak solution of gutta-percha in bisulphide of carbon, it is rendered non-adhesive. We have in this a durable and perfectly reliable antiseptic external dressing or guard, and at the same time a light and neat one.

3. Antiseptic Ligature.

This is prepared by steeping the silk thread for two hours in strong fluid carbolic acid, prepared by adding a small proportion of water to the crystals. This ligature is applicable to the

deligation of main arteries in their continuity, or arteries on the face of a stump or wound.

The antiseptic curtain is a piece of muslin saturated with oily solution of carbolic acid, under which cavities are punctured, to prevent regurgitation of any air except that which has been deprived of its germs by being filtered through a carbolic acid vapor. The antiseptic guard is the external antiseptic dressing, which is a reservoir of the acid, to be replenished from time to time, preventing the introduction of septic germs to the wound, and yet allowing the discharge to flow out under it.

In the manipulations required in carrying out the antiseptic system of treatment, we must ever bear in mind the existence of septic atmospheric germs, and be particularly careful in not allowing the air to have access to the surface of a solution of continuity or cavity before it has been filtered through an antiseptic dressing.

The watery solution should be freely applied to all wounds of whatever character. In compound fractures, care should be taken to have the solution penetrate to all the recesses of the wound; during and after the performance of all surgical operations, the cut surfaces should be washed with it.

The alcoholic solution is to be used in the same cases when some hours have elapsed between the solution of continuity and the application of the antiseptic.

In the performance of operations, all the instruments, probes, knives, etc., should be dipped into a solution one to four of olive-oil before being used. If the operation involves the opening of a joint or serous cavity, drop a one to four solution in the track of your incisions.

In external wounds opening into the pleura or peritonæum, a solution one to four may be introduced by strips of lint into the cavity.

Dr. Weisse closed his paper by a summary of the modifications of our pathological views, which in his estimation were forced upon us as the results of the antiseptic method of treating wounds, and he also gave a *resume* of the various applications of this method.

Dr. E. R. Squibb was called upon by the President, and remarked: I have some knowledge of carbolic acid which I may add to that given in the very interesting paper we have just heard. I confess to a strong prejudice, since first reading Mr. Lister's articles, against what I have regarded as a needless complication of a simple method already well known. Moreover, Mr. Lister's honesty and earnestness grew into fanaticism,

and led him to exaggerate and over-dose. At first he was inclined to use the undiluted acid in wounds; but he has now got down to two per cent. in water, and finds this strong enough.

We have been misled a little in the use of the crystallized substance known as carbolic acid. The term has ordinarily been applied to three associated substances, phenyl-alcohol, cresyl-alcohol, and xylic-alcohol, belonging to a series which includes most of the aromatic oils. They have all been pretty well proven to be alcohols, and they are not acids by any definition of this word. Of late, however, it has been disputed by Kekule and others that these substances are alcohols, and this opinion would seem to be gaining ground. Of these three tar-alcohols, the phenyl is crystallizable, and has the lowest boiling point. As these became an object of commercial manufacture, the matter was taken up by a Fellow of the Royal Society, a pupil of Laurence, Mr. F. Crace Calvert. Seeing that there was one of the group which required much chemical knowledge and skill to produce it nicely, and knowing that, should he attempt the manufacture of the others, he would be subject to much competition, he turned all his attention to the production of the most difficult, the crystallized phenyl-alcohol, without knowing that it was the least effective of the three. He had no competition. Up to the time of the investigation of the cattle-plague, the other tar-alcohols were supposed not to be antiseptic at all. When Mr. Crookes, and Dr. Smith, and others, took the matter in hand, they had no desire to damage Mr. Calvert's commercial prospects; but were finally compelled to admit that the phenyl-alcohol had no exclusive virtues. In his first report, Mr. Crookes says that the cresyl-alcohol has been supposed to have no antiseptic properties whatever, but that it seems to be nearly if not quite equal to the crystallized preparation. This remark led me to look into the subject; and some experiments convinced me that the cresyl-alcohol is far more efficient than the phenyl. Mr Parkes says that the impure acid, that is, the whole group together, is better for all purposes to which he has applied it, than are the crystals. Indeed, the whole group as found combined in the old-fashioned creasote, the ordinary creasote of the market, is the thing after all. Its efficiency has never been excelled by any of the separated "acids," and the result of their separation is merely to enhance the cost. As I before remarked, this whole matter of the antiseptic treatment of wounds has been too much complicated. Simple watery solutions would probably produce quite as good an effect as these putties, plasters, lac, etc. With regard

to burns, I can claim to speak from experience. A watery solution of creasote, of the strength of about one-half of one per cent., or the creasote-water of the pharmacopœia diluted about one-half, applied on a single thickness of old pocket-handkerchief, will allay the pain of a burn sooner than any thing else. Thus diluted it is a most valuable local anæsthetic. Under this dressing, a burn of the first degree will usually heal without suppuration. One of the second or the third degree will not; nor will it under Mr. Lister's applications. The septic-germ theory of Pasteur, though now commonly accepted in a general way, cannot be made responsible for all the evils of suppuration without grave mistake.

Dr. Jacobi wished to inquire of Dr. Squibb what was the chemical or physical effect of the creasote, undiluted or in strong solution, on healthy tissue?

Dr Squibb: Its prominent characteristic is to coagulate albumen. A strong solution applied to the surface turns the epithelium white, by virtue of this property. The whiteness disappears after a time, and the epithelium becomes again transparent. But this transparency indicates no return to its normal condition. The albumen once coagulated, it is dead, and must peel off. Another curious effect is noticeable: if too strong a solution is applied to a burn, it does not appear to relieve the pain; I have repeatedly seen a one or two per cent. solution fail to give relief. The character of the pain produced by a strong solution is exactly like that of a burn; but in the behavior of the two there is this difference: If the part rendered painful by such an application be held up so as to drain it of blood, the pain is increased till it may become almost insupportable; if held down so as to allow the influx of blood, the pain is diminished; herein the pain is like that from chloroform, and is exactly opposed to that from a burn.

I might add that the reason why anatomical specimens are so often rendered opaque and unfit for microscopic examination, by being preserved in carbolic acid, is doubtless the too great strength of the solution employed. I suppose an aqueous solution of one-fourth of one per cent. of the cheap impure acid ought not to injure a delicate specimen. I have now in progress a series of experiments to determine this point, using solutions varying from one-tenth of one to one per cent., which last, I am convinced, is quite too strong. The best test of the proper strength of your solution is its application to the tongue. If it coagulates the albumen, producing an effect like that of hot tea or coffee, it is too strong.

Dr. Jacobi: I am glad to see, Mr. President, that the chemist agrees perfectly with what many of us have repeatedly seen. I have made the same observation with regard to the pain, and the effect of position upon it. I have felt, too, that, if the antiseptic treatment is to be of any use, it must be simpler than Mr. Lister has made it, for by his plan each patient requires five or ten times as much attendance as usual. I have myself used carbolic acid in a great number of instances, both upon living and upon dead tissue. A solution of one-tenth applied to croupous membrane will cause it to shrivel up in a very short time; and the very beneficial effect of the acid upon diphtheritic membranes is due to its coagulating power. But this very property leads me to think that solutions of one-fifth to one-twentieth applied to wounds, etc., as in Mr. Lister's practice, will have an effect just the reverse of what he intends. He wishes to preserve healthy tissue; I think I have often destroyed it by using a solution too strong. I know that a number of years ago, when I knew less about the subject than I do now, I very speedily destroyed the cornea in a case of diphtheritic conjunctivitis. I applied a very thin layer of a dilution of one part to eight or ten of glycerine and water to the conjunctiva; the cornea thus became slightly touched by it, and the result was that it was perforated much earlier than in the normal course of the disease. The diphtheritic affection might have caused perforation in thirty-six hours, while I had done it in five or six. I have seen the shrinking and destruction of healthy tissue immediately follow the use of strong solutions; and I agree with Dr. Squibb, that we have not yet reached the minimum of strength desirable. I now commonly employ a dilution of three or four grains to the ounce. I have used it to wash out the uterus in puerperal endometritis; and I am confident that in many cases of this kind, which have lately come under my hands, the patients have owed their lives to this treatment. In very bad cases, I have used intra-uterine injections of twenty grains to the ounce; but then I am careful to use very little of the injection, to throw it directly into the uterus, and immediately to wash out the vagina with a milder solution, to avoid the unpleasant effect which the stronger one would produce upon it. In cases of common catarrh of the external ear, which are often as obstinate as they are uncomfortable, I have employed a three or four-grain solution, and found them yield more speedily than to any thing else.

Dr. Chadsey had made use of carbolic acid from its first introduction, always in weak solutions, never stronger than one

part to forty. A severe burn of the second degree had healed without suppuration under a dressing of the acid covered with oiled silk. He had gained happy results in gunshot wounds, putrid sores, disease of the ear, leucorrhœa, and gonorrhœa. For the latter cases, glycerine rather than oil should be used as a solvent, to avoid staining the linen.

Dr. Smith wished to know whether tissue, whose albumen has been coagulated by any means whatever, could possibly retain its vitality; and if not, how such devitalized tissue was gotten rid in wounds subjected to Lister's treatment?

Dr. Weisse thought it was carried away by absorption, and that the results proved this.

Dr. Jacobi doubted whether albumen so coagulated would find any solvent in the fluids of the wound; and if not, then its absorption was impossible, for absorption could take place only after solution or fatty degeneration.

Dr. Griscom had given inhalations of carbolic-acid vapor in a case of abscess of the lung, with a happy effect.

Dr. Weisse, referring to the statement that Mr. Lister had come down from the use of the pure alcohol to that of a two-per-cent. solution, said that he would doubtles come lower yet, only he wished to feel his way carefully, without incurring in any case what he woud deem a risk to the patient. Mr. Lister by no means claimed that all suppuration was due to septic germs. He simply said that experience had taught him that you will limit suppuration in a wound if you prevent decomposition of its fluids.

Dr. Stein had made considerable use of the agent. He preferred tin-foil to protect the dressings, as it could be most nicely adapted to the surface. He had assisted in the removal of nearly the entire frontal bone, for necrosis supposed to be syphilitic, the soft parts having previously sloughed. The suppuration, which was excessive, was checked under the application of carbolic acid, and the wound healed very well. Iodide of potassium was freely given.

Dr. Chamberlain, attempting on one occasion to use what he believed to be the impure acid, had found it quite unmanageable, of about the thickness and color of dark molasses, nearly insoluble in water, and indelibly staining the vessel. He wished to know if he had obtained the right article.

Dr. Squibb: "That, sir, is not the 'impure' but the 'crude' carbolic acid. Nothing should ever be used for medical or surgical purposes which is not transparent, though it may be dark. The impure acid is made by redistilling the crude; it is

a combination of the three alcohols, and would much better be called creasote, for it is identical with the old-fashioned coal-tar creasote. A mistake often made is that of prescribing a solution, and getting this; and fearful accidents have occurred from its application pure to burns, etc. The safest mode is to dispense the crystals by measure. The impure acid is never wholly soluble in water, but it should leave merely a slight scum. The tar and oils are rendered more soluble by the addition of alkalies, an occasional adulteration."

"Having answered Dr. Chamberlain, I would say that Mr. Lister began at the wrong end, with the heroic style of treatment. I think it a very interesting question—what did become of the coagulated albumen sealed up by him in his early operations; for he used a large amount of the acid, dipped his finger into it, and smeared it all around inside the wound. If we could suppose pepsine to be introduced there, and a process of digestion to be set up, one might look for absorption. I think it most probable that the coagulated material, in such cases, becomes encysted, like other foreign bodies, for it is, to all intents, a foreign body. Mr. Lister's system illustrates what seems to be a strong tendency in human nature—to seek complication. I am constantly finding persons leave the simple solution I have recommended for burns, and go to ointments, etc., which are not only useless but hurtful."

THE PRESIDENT: "I may say that, two years ago last October, I commenced to direct that the wood-work of all the lying-in wards of Bellevue Hospital should be daily dampened with a solution of the crystals, two grains to the ounce. I afterward replaced this by a cheaper preparation of about the same strength. We have since a great diminution in the mortality there; but I would not ascribe this to carbolic acid alone, for we are very careful in our hygiene. In addition, I always direct that every woman in the lying-in ward shall have her vagina thoroughly disinfected. I make it the duty of the interne to see that no woman has any smell of the lochia about her; and for that purpose we have used carbolic acid, Labarraque's solution, and the permanganate of potassa. The last I have now discarded, because the specimens furnished were found irritating, perhaps from some admixture of caustic potash. I am not prepared to say that the carbolic acid is preferable to the Labarraque. Moreover, whenever a woman's vagina is found difficult to disinfect—and we meet with such cases now and then—it is made the nurse's duty to have a large piece of rag, saturated in a solution of the acid, laid near the vagina.

We do not rely upon these means alone; when the floors are washed, a bottle of Labarraque's solution is added to the bucket of water; pans of chloride of lime are placed in the wards, and also shallow dishes of carbolic acid; the windows are kept open day and night, and the doors nearly all the time. It is certain that, by one or all of these means, we are getting clear of puerperal fever in that hospital.

"As to the manner in which carbolic acid checks suppuration, it at this moment occurs to me, as a matter worth investigating, whether it may not possibly so affect the capillaries of the part to which it is applied, as to prevent the lymph globules from escaping."

The Society then adjourned.

—*New York Medical Journal.*

MEDICAL SOCIETY OF COUNTY OF NEW YORK.

Stated Meeting, June 7, 1869.

Dr. GEO. T. ELLIOT, Jr., President, in the Chair.

The President announced the election of Dr Robert McNeil to membership.

Dr. Salvatore Caro read a paper upon *the Treatment of Summer Complaints by the Bromide of Potassium.**

Although the title of this paper comprises the entire range of diarrhœal diseases both of adult and infantile life, special reference was had to the diarrhœal diseases of infancy, cholera-infantum standing prominent in the list. The causes, symptoms, progress, and termination of this complaint were described at length, as well as, in a general way, the treatment which is usually considered orthodox in these cases. Then stating that an accidental success in the treatment of several cases, wherein he had administered the bromide for other purposes than to control the diarrhœa, had led him to more fully test the value of this remedy, the speaker narrated twenty cases which might be taken as types of the cases usually met with in practice, and which were selected from 163 recorded cases occurring under his own observation. We present herewith, from the *Record*, five of the cases in full:

III. John Sinott, 28 months old. I took charge of him on

* This paper is published in full in the *Medical Record* of July 1, 1869.

the 1st of August. For several days he had been suffering from vomiting and purulent discharges from the bowels. I prescribed aromatic syrup of rhubarb with laudanum, but without effect. On the 2d, I gave twenty drops every hour, of a mixture of ten grains of bromide of potassium, in an ounce of mucilage, with twenty minims of krameria. After a few doses the child slept, and upon awakening asked for bread and butter. Vomiting ceased. The flux of the bowels changed from purulent to yellow; and the 24 to 30 passages, every 24 hours, diminished to six. He became convalescent, and on the 8th was discharged.

IV. J. A. Criger, 20 months old; has twelve teeth. According to his mother's statement, he has never given trouble, eating and drinking whatever was offered him. On the 3d of August he fell from a chair, striking his buttock, apparently receiving no injury. During the night his bowels became loose, accompanied by a dirty-water-like substance. In the morning he had convulsions. During the afternoon I found him very comatose; pulse from 95 to 100; pupils dilated; hemiplegia of the right side; alvine discharges, from twelve to fourteen, every 24 hours, of a thin fetid matter. About every six hours, convulsions of ten minutes' duration, accompanied by vomiting. I prescribed revulsives to the lower extremities and arms; and, every two hours, twenty drops of a mixture of one drachm of bromide of potassium, in an ounce of mucilage. The motion of the bowels and vomiting ceased.

After a few days, as the comatose and hemiplegic condition continued, iodide of potassium brought matters right. On the 1st of November he had another fall, merely affecting his bowels by free motion; the bromide of potassium immediately stopped it.

V. John Balheimer, 13 months old; has six teeth; is fed by the bottle. On the 15th of August I saw the child for the first time. He had been suffering for 14 days from inflammatory dysentery, having passages of a purulent and bloody nature, from 20 to 24, every 24 hours. His thirst was intense; he vomited every fluid offered him. The eyes were sunken, pupils dilated, skin corrugated and spotted blue, body cold, tongue red and dry, pulse imperceptible; no urine. In addition to this, he had bronchitis, with severe cough. I prescribed 1 scruple of bromide of potassium, in an ounce of mucilage, with ½ drachm of tincture of krameria, 20 drops every two hours. The passages decreasd. On the 16th day of his sickness, and the second under my care, he was able to eat and sleep. His passages were only 4 in 24 hours, and of a healthy appearance.

In order to allay the bronchial cough, I prescribed 10 drops of fluid extract of poppy, to be taken every two hours. On the 1st of September, he was discharged. A few days later he had a relapse, and on account of distance was placed under the care of a homœopathist, and died.

On the 15th, an elder brother was brought to me suffering in a similar manner from dysentery. The disease was immediately checked by the bromide of potassium.

X. J. McEvoy, 12½ years old: a healthy boy, attending school. August 13th, having eaten a bellyful of green apples, he was seized with cramps in the belly and legs, colic pains, vomiting, and loose bowels. For 48 hours his parents doctored him with castor-oil, paregoric, cholera drops, mustard baths, etc., etc., but without giving relief. I was sent for on the 15th, the third day of his sickness. I found him with eyes sunken, skin cold and corrugated, extremeties bluish, which upon being touched would leave the white impress of the fingers for more than 25 seconds. The abdomen was almost struck to the vertebral column; breath hurried and hot; tongue pale; voice scarcely audible. The boy was shivering with cold, although covered with mustard plasters, blankets, etc., and in an exceedingly hot, low-ceilinged room on the top floor. His thirst was intense. The drinks given him were, rice-water, beef-tea, brandy-and-water, ice-water, milk-whey, etc. No sooner taken than ejected indiscriminately, both up and down, almost in their natural state. I thought this case almost hopeless, but, trusting to the efficacy of the bromide of potassium, I prescribed ½ drachm in an ounce of water a teaspoonful every two hours; also a flaxseed meal poultice over the abdomen. The second dose caused great reaction, stopping the vomiting and flux of the bowels, and the boy fell asleep. The next morning I found him in his hot unhealthy room, laughing and well.

I have had 25 similar cases, ranging from 12 to 46 years of age.

XIV. J. Higgins, a healthy infant, deprived of the breast from his mother's dying seven days after confinement. When only three days old he began to suffer from retention or meconium. All nourishment was ejected with great force, even the breast milk of a woman confined five days before his birth. The stomach, from the irritating action of the meconium, could not retain either medicine or food, nor could the bowels be moved. Ten grains of the bromide of potassium in an ounce of orange-flower water, ten drops every hour, put a stop to all disagreeable symptoms; the baby slept, its bowels moved, and,

after the discharge of the meconium, it commenced to nourish from the bottle without any further disagreeable results.

I had three similar cases, not owing to the mothers' death, but the infants being deprived of the maternal nourishment from other causes.

The paper concluded as follows:

Now let us speak on the merits of the drug. Taking for granted that, in matters of fact, in medicine particularly, we can judge better *a posteriori* than *a priori*, I submit my cases and conclusions to this enlightened body. Not accepting the doctrine of some of the modern writers, that the intestinal flux is a symptom of some inflammatory affection, but adopting the opinion of the celebrated Capuron, that infancy being naturally the age of nervous sensitiveness, susceptible to internal and external impressions, easily irritated or calmed, and judging from several other cases besides those just read, I think that, in its beginning, summer-complaint arises from an over-excitement of the nervous and vascular systems, and that therefore the bromide of potassium affects it, and acts as a sure cure.

I cannot better explain the action of the bromide of potassium on the system, than by quoting the words of Headland, found on page 272 of his work, "*On the Action of Medicines*," "The bromide of potassium, a medicine of the mineral kingdom, has been much recommended lately for its power of producing sleep; it is, however not a true soporific, but rather a general sedative. As far as my experience goes, it acts by allaying irritability of the brain, spinal cord, and sexual system, and thus may indirectly cause sleep." And on page 283,—"The bromide of potassium, a remedy of recent introduction, is exceptional among nerve medicines as, belonging to the mineral instead of the vegetable kingdom. It quiets the nervous system generally, allays pain, promotes sleep, and subdues a morbid irritability of cutaneous or mucous surfaces, by its influence over functional disorders of the nervous centres. It is only indirectly soporific, as far at least as I have been able to judge." Mr. Gubler considers the bromide of potassium a general sedative to the nervous system, allaying irritability of the mucous membranes, and at the fauces and genital passages especially. He thinks it hypnotic, causing sleep by its sedative action on the whole nervous system. M. Vigouroux thinks it acts by diminishing vascularity of the great nervous centre. It is therefore the remedy, *par excellence*, for the nervous complaints that are common in large cities.—(*L' Union Medicale*, 1864.)

I have never discovered any unpleasant effects produced by

the use of the bromide of potassium, and have always found it to answer my purposes. If locally applied, it reduces the excessive heat found in the mouth of the baby, caused by the inflamed condition of the gums. On introducing the thermometer into the mouth or anus of the baby, I have seen the temperature fall four or five degrees. The drug is an anæsthetic to the nerves of the mucous membrane of the alimentary canal from the mouth to the rectum, of the urethra, the conjunctiva, and the nares. It is also a diuretic. In cases where the urine has not been voided for 24 hours, after the first dose of the bromide it is freely passed; the skin commences to feel warm, and becomes covered with a gentle perspiration, removing uræmic symptoms, causing general reaction, and invariably the decrease of the intestinal flux, and an absolute cessation of vomiting.

The medicine being almost tasteless, and of no bulk, it is easily taken by the most fastidious and troublesome child. I generally prescribe from 10 to 30 grains in an ounce of vehicle, either mucilage or orange-flower water, for their pleasant taste; the dose being 10 to 30 drops every hour or two, varying according to the age of the patient, and the acuteness of the case. I seldom use astringents with it; but, if required, I select the tincture of krameria, as less disgusting than kino and others. For local application, I mix the salt with mel rosarum, generally using one scruple of the first to an ounce of the latter, permitting the mother to rub it on the gums with her finger *ad libitum*. When used in large doses, I have not found very satisfactory results from the bromide of potassium; but I always succeeded with minute doses.

You will observe that, of the cases I have just reported, only three died, and the fatal result in these was due not to the bowel complaint, but to other causes. I had also four cases which I purposely and obstinately treated according to the generally-adopted system. To my regret I must confess, that but one, after a severe and hard struggle, recovered; the other three died.

Dr. Calkins deemed hot-water and hot-vapor baths invaluable auxiliaries in the treatment of the bowel complaints of children, and related a fatal case, which he thought had suffered from their omission.

Dr. Garrish had found the bromide fail to control the nausea and vomiting of pregnancy, and asked Dr. Caro's experience.

Dr. Caro had not used the drug in pregnancy, as he had gained the impression, from something in his reading, that it was emmenagogue, and might do harm. He had found it im-

mediately arrest the vomiting in the case of a woman with Bright's disease, who had, for three or four weeks, been unable to retain food. It had stopped the nausea and vomiting in a case of typhoid double pneumonia.

Dr. Chadsey had been using the bromide quite freely, for the last three months, in affections of the stomach and bowels. It had happily relieved the only case of cholera-infantum he had chanced to have in at that time. In a case of vomiting, in the commencement of pregnancy, which nothing else would check, it had been promptly effective, and no bad results had followed—indeed, none had been anticipated. A druggist, having a very large prescription business, had said that the consumption of the bromide had quadrupled within a short time, and that it was now greater than that of the iodide, which it was replacing in many instances.

The President was asked whether he considered the bromide an emmenagogue. He replied that he had used it in many cases of pregnancy, as well to control the nausea and vomiting as for other indications, and his experience was that it had no emmenagogue action whatever. He was in the habit of employing it freely, and in large doses, in dysmenorrhœa, to gain its sedative effect, and he had never seen it increase the flow. He could not, therefore, think we were justified in refraining from its use on account of the pregnant condition. He had not found it so satisfactory a remedy in the nausea and vomiting of pregnancy as to lead him to give it the first rank; but neither did he know any other remedy to which this could be assigned. In the treatment of such a symptomatic disorder we must expect failure. It was trying to remove the effects of the thorn in the flesh, without removing the thorn. Among the articles that had lately appeared, commending the bromide in the various forms of nausea, was one by Dr. Storer, of Bos ton, showing that it counteracted the nauseating effects of ether.

With regard to the class of cases related by Dr. Caro, Dr. Elliot yielded entirely to him in experience, and could speak, from personal knowledge, of his accuracy of observation and record. His testimony was of such value that it would probably more or less shape the practice of his hearers this summer. In the case of a rachitic little child, suffering from whooping-cough and bronchial catarrh, with a good deal of diarrhœa, refusing nourishment, and lying on the bed, with hot skin, restless and fretful, Dr. E. had given the bromide alone, and its effect was delightful. It had produced like results in one or two other cases equally unpromising.

As to the extended use of the salt, Dr. Chadsey was certainly right. Probably every druggist was now selling much more than four times as much of it as a few years ago. For his own part, while prescribing it much more frequently than before, it was not so lately that Dr. E. had been awakened to its value. Fourteen years ago it was his favorite remedy in spasmodic croup, and bronchial catarrh, with irritation of the respiratory passages. Having about that time a troublesome case of spasmodic croup, he had at last given the mother the prescription, labelled "Preventive for croup," to be used whenever she saw an attack coming on. On her return from Europe, the lady said it had worked so well that she had given the prescription to some sixty families.

The hypnotic action of the bromide was so well known as to need no comment. The danger was, now, that too many of the public would acquire the habit of taking it, as a regular thing, to procure a quiet night's sleep. Dr. E. believed that a gentleman of this city had lost his life from its excessive and habitual use. A prescription given to secure sleep, this man had kept and had renewed, again, and again, until he used to lie half the day in a state of languor. Coming under the speaker's care, his habit was discovered, and finally given up; but not before it had produced the prostration which was probably the cause of his death.

Dr. Caro, in response to questions, said that he had commonly given the small doses—¼ of a grain to 3 grains—mentioned in his record of cases; and that he had never, save in a single instance, given a dose larger than 8 grains. He had seen no eruption follow, except in one case, and there he thought it not attributable to the bromide.

Dr. Kennedy thought the dose of the drug might be considered very indefinite. He had himself taken a large amount of it last winter, for an obscure trouble in the head and pain in the shoulders—the doctors were undecided about the diagnosis, but agreed in recommending the bromide. He had begun with a solution of 2 drachms of the salt to 4 ounces of water, a teaspoonful every three or four hours. This dose he increased till he was taking 2 and 4 drachms of the salt daily. Then he bought ½ a pound of it and made a saturated solution, of which he took at first a teaspoonful, and afterward a tablespoonful, four times a day; and he might have taken more without injury. It gave a very pleasant night's rest, and a delightful feeling of languor and lassitude, which was continued for days and weeks. He had observed the eruption; also that the medicine disturbed

the bowels and stimulated the kidneys; but, in his own case, it did not at all disturb the stomach, simply producing an agreeable sense of warmth. He believed that, where the nervous system is irritated, from whatever cause, and it becomes necessary to soothe either body or mind, the bromide is an excellent remedy. He would recommend it to be taken freely in such cases, and especially by rum-drinkers.

The President stated that a saturated solution in water was one part to four.

Dr. Farnham referred to the cases reported by Dr. Hammond, where the bromide, in large doses, had produced insanity.

The President had once given ½ an ounce in the course of one night, in a bad case of delirium tremens. The morning came, and it had produced no perceptible effect; but a shower-bath on the head and neck put the patient to sleep in a couple of hours. He would hardly give such a dose again; for, although some persons might bear it well, there was undoubted testimony to its evil effects on others. We should remember the fate of Fountain, who to prove his views of the harmlessness of chlorate of potassa, took the dose which killed him.

Dr. Howard had used 10 grain doses, every two hours, with great benefit, in cases of sick headache.—*N. Y. Med. Jour.*

Proceedings of Societies.

CHICAGO MEDICAL SOCIETY.

FRIDAY EVENING, *Sept. 3, 1869.*

The regular semi-monthly meeting of this Society was called to order, President R. G. Bogue in the Chair.

The Secretary read the minutes of the last meeting, which were duly approved.

In the regular order of business, the name of Dr. C. J. Lewis, was proposed for membership, by Drs. Ingalls and Wanzer.

Dr. Bogue, as Chairman of Committee to draft resolutions in case of the death of Dr. F. O. Earle, presented and read said resolutions, which were accepted by the Society with the pro-

vision, that the resolutions be published in the city papers, and a copy be furnished the family of the deceased.

The discussion of the "Pathology and Treatment of Hæmoptysis," was opened by Dr. Hurd, who gave a detailed and interesting account of the symptoms connected with hemorrhage from the lungs. Thinks if there was clotted blood in the lungs there would be dulness on percussion, but *post mortems* generally show that the blood is infiltrated into the lobules. Is of the opinion, that in the majority of cases there is no special lesion of the coats of the artery, but where from tuberculous deposit it comes from the vessel itself and not from transudation. Considers hemorrhage merely a symptom that generally occurs before the softening stage, the tubercle acting as a foreign and irritating body. Thinks there is less heart disease in cases of hæmoptysis than Trousseau would have us believe. Carcinoma of the lungs may also be a cause as well as thoracic aneurism, pneumonia, and gangrene of the lungs.

Thinks the only thing we are apt to confound it with is *hæmatemesis*, although in this condition the blood vomited is blackened and decomposed. If the blood only tinges the sputa, it may come from the pharynx. Also spoke of the occasional occurrence of vicarious menstruation which might be the cause of the hemorrhage.

He considers the prognosis very bad, as it is generally due to tubercle. Treatment, gives plumbi acets and opii frequently; and Aitken recommends potassa bitart. ℥j.; P. opii gr. j., given often and continued for forty-eight hours. If there is labored action of the heart, arterial sedatives. The French use leeches to chest. He also spoke of Warren's styptic —sulphuric acid dropped into alcohol, and a sol. ferri per sulphates, but he did not like the action of the last-named remedy.

If the hæmoptysis be due to vicarious menstruation, then determine the blood to the uterus; recommends argenti nitras to be applied to the os uteri.

Dr. Marguerat thinks there is no disease more trying to the physician. As regards the prognosis. Says there is great

diversity of opinion, some contending that nine-tenths, while others not more than one-half of the cases of hæmoptysis are due to tuberculosis. Says he saw one case where there was no signs of tubercle. Of the treatment, Dr. M. considers the French too heroic, as they bleed too much. Says if we adopt the theory that many cases are not due to phthisis, but congestion, we should bleed. Says Dr. Watson leeches in these cases. has not much confidence in medicine to relieve the hemorrhage, but depends more on quiet, cooling drinks, and good fresh air. Says he has never had a case of fatal hæmoptysis, and that Dr. Flint says he has never seen a case of vicarious menstruation in his whole practice, hence is of the opinion that it is of rare occurrence.

The Doctor referred to the case of a young man whom he was called to see, a few weeks since. It was at night, and when he arrived he found that the patient had spit up two or three teaspoonsful of blood. Could detect no signs of phthisis at the time, but nevertheless the young man died of phthisis in two weeks.

Has at present a young lady under his care, who suffers from hæmoptysis. The lady is fleshy and rosy, and does not look at all like a tuberculous subject, but nevertheless ascultations reveals metallic tinkling over a small spot posteriorly.

Dr. Frediegke thinks we are apt to find many of these patients plethoric, and, in such cases, thinks that veratrum viride, in full doses, accompanied by astringents, may be found very beneficial.

Dr. Paoli remarked, that we have to be very careful in our decision, for tubercle may exist in the lung, while the tissue external to the deposit may be healthy; hence, percussion is clear, and ascultation good, *post mortem* only revealing the presence of tubercle.

The Dr. further said, that the distinction between hæmoptysis and hæmatemesis was, that in the former, the pulse was hurried and excited, while in the latter it is slower, and the face is congested. Cited a case which he saw in Small-Pox Hospital, some 12 years ago. Patient suffering from cirrhosis of the

liver, when there was hæmoptysis to the amount of 12 ounces. Lungs dull on percussion. On *post mortem*, there was found to be, in addition to the cirrhosis of the liver, calculi of the ducts; while the hemorrhage seemed to have been entirely from the larynx.

Of the treatment: does not recommend bleeding, in the asthenic cases. Thinks gallic acid, in 10 or 12-gr. doses, every half hour, far preferable to the opii and plumbi acetatis, as it does not tend to constipate the bowels. The pulse may be diminished by digitalis, keeping patient quiet, and administering cool drinks. Says he has never seen a case die, but admits there are no cases more perplexing and alarming to the physician than those of hæmoptysis.

Dr. Fitch said, his experience had not been very great, but the majority of cases of hæmoptysis that had come under his observation had resulted in tuberculosis. Had never treated a case of hæmoptysis in a plethoric subject, but if he were called in such a case, he should not hesitate to bleed. The usual treatment employed by him consists in elevating the shoulders; ice to chest; gallic, or tannic acid, or lead and opium internally; and, in some cases, has seen great benefit derived from ergot, with sinapisms to the extremities and acidulated cold drinks.

Dr. Merriman remarked, that his experience had, also, been quite limited, but that he had seen several cases of great interest. Was called one night last winter to see a man who was bleeding from the lungs; but, when he arrived, found the patient dead. Patient had complained of a feeling of oppression in the chest, followed by a copious gush of blood over the side of the bed. This was a tuberculous patient.

Another was in the case of a rosy-cheeked, plethoric young lady, who was dressing to go to a party, when she was suddenly attacked with bleeding from the lungs. Dr. says he was in the next house, and was summoned immediately. When he arrived, found the woman's garments and bed saturated with blood, the woman having completely fainted away. Judges the amount of blood lost to be from 12 to 16 ounces.

In a week, she had another attack, and lost 6 or 8 ounces of blood, and continued to have them for six or eight weeks, losing from 2 to 8 ounces each time. The hemorrhage occurred about three years ago, and the lady is now married, the mother of a fine healthy baby, and in perfect health herself. The treatment in this case consisted in the administration of plumbi acetatis, and opii, and sulphuric acid and iron, latterly, with good hygienic treatment.

The discussion was also participated in by Drs. Hutchinson, Bridge, and others. The President announcing the discussion closed.

The committee ordered to draft resolutions, in case of the death of Dr. D. D. Waite, consisting of Drs. Davis, Loverin, and Paoli, rendered the same, which was read before the Society, and accepted, with the provision that the resolutions be published in the city papers, and a copy of the same be furnished the family of the deceased.

Dr. Davis remarked, that he had known Dr. Waite a good many years, and spoke in the highest terms concerning his ability and character. Said that while Dr. Waite was President of the Chicago Medical Society, it was never more prosperous; and that it was due to the energy of their President, who left it in a more flourishing condition than it had been for yeaas. Dr. D. further remarked, that owing to Dr. Waite's ill health, we have not seen much of him of late years, but the older members of the Society will remember him as one of their most attentive members, and earnest, hard workers.

Dr. Paoli also made equally complimentary remarks.

Dr. Marguerat said, that the last time he saw Dr. Waite was about one year and a-half since, when he saie to Dr. M.: "Tell my friends in the Society that I am with them, if not in person, in heart and soul."

Dr. Loverin also made complimentary remarks.

The Society then proceeded to miscellaneous business.

Book Notices.

The Structural Lesions of the Skin, their Pathology and Treatment. Illustrated. By HOWARD F. DAMON, A.M., M.D; Fellow Mass. Med. Soc.; Secretary Boston Obst. Soc.; Admitting Physician to the Boston City Hospital, and Physician to Department for Treatment of Skin Diseases among Out-Patients; Author of Photographs of Skin Diseases, The Neurosis of the Skin, etc., etc. Philadelphia: J. B. LIPPINCOTT & Co. 1869. Pp. 255; 8vo.

Almost every author upon skin diseases has seemed to find it necessary to invent a new system of classificatiom. Not to mention those of the two preceding generations, when the science had fairly to be founded, we have, at the present day, the widely different classification of Hebra, Devergie, Hardy, Cazenave, Wilson, and Buchanan; all eminent men, while others scarcely less eminent have introduced noted modifications into those systems which they have adopted as their basis.

Dr. Damon also claims "a new system of classification, based" as he says, "upon anatomical, physiological, and pathological data." "All skin diseases" he remarks, "may be separately included under one or more of the following causes:—secretion, nutrition, and structure,"—and thus he obtains the following classification:—

CLASS I.—Neurosis.
" II.—Functional Diseases of Cutaneous Glands.
" III.—Inflammation of the Skin.
" IV.—Structural Lesions of the Skin.

This awakens a shadowy recollection, as though familiar. We find Rayer's classification of 1835 to be—

CLASS I.—Inflammatory Affections.
" II.—Non-inflammatory Affections.
" III.—Diseases of the Secreting Functions.
" IV.—Neurosis.
" V.—Faulty Structure, or Unusual State of one or

other of the Elementary Components of the Skin.

" VI.—Degenerations.

Now, if we omit the second of these as supernumerary, and condense the fifth and sixth into one, with a name which shall express their common character—say structural lesions—there results a classification, not merely similar, but identical with the one proposed by Dr. Damon. Although possessing hardly as much originality as the author claims, the classification is a good one, and a decided improvement on Rayer's.

Dr. Damon very naturally divides "structural lesions" into hypertrophies, atrophies, and pathological new formations (nutrition increased, diminished, or perverted). Comparing his with Hebra's similar divisions, we find that he has transferred to pathological new formations, lupus and elephantiasis arabum, the one from Hebra's "Chronic Exudata;" and the other from his hypertrophies. These changes seem very reasonable to us, in view of the recent investigations in the pathology of these diseases. On the other hand, callus, molluscum, and condyloma are transferred to hypertrophies, while the important subject of cicatrices is entirely omitted.

In his introduction, Dr. Damon has shown the scope of the work, and given brief notices of the more important lesions, with reasons for certain new views, so that a student will undertake the work understandingly.

The various hypertrophies are treated in a condensed way, most of them being passed by with few words.

The author recommends careful study of the position and form of callosities, as from them "it is quite possible, in many instances, to identify a person as belonging to a certain trade," and "it may be the subject of medico-legal evidence, in cases of doubtful identity."

Pigment excesses receive more attention than the other hypertrophies. From facts presented by other observers, Dr. Damon draws the conclusion, "that the deposition of pigment in the skin, under certain physiological and morbid conditions of the economy, depends upon the influence of the ganglionic

nervous system." So far as presented, the data certainly seem to indicate this generalization. He does not bring this view forward as a new theory, but claims simply more or less to demonstrate what has hitherto been merely assertion. The article in this connection on Addison's disease, giving generalizations from 202 cases, is very interesting.

22 pages suffice for atrophies.

Pathological new formations derives its chief interest from the articles on elephantiasis arabum and elephantiasis græcorum, which give in small compass the latest views upon these subjects. The descriptions of both diseases are lucid, and while showing resemblances, show, at the same time, obvious differences existing between them, both in appearance and in pathology. Dr. Damon regards "the origin and seat" of E. arabum to be "in the lymphatic vessels and glands of the affected extremity." The disturbance in these glands causes an interruption to the passage of lymph, and the subsequent phenomena." He quotes very concisely the opinions of Rasmussen and M. Mestre upon this disease, and agrees with the latter when he says: "two predispositions are necessary, in order that elephantiasis may become developed—one due to climateric action, and the other dependent on an idiosyncracy of the individuals."

The symptoms and appearance of E. græcorum, Dr. Damon thinks, receive the most satisfactory explanation from the lesions found in the central nervous system, for the knowledge of which we are indebted to the investigations of Danielssen and Boeck. He regards it as hereditary, but not contagious, and thinks the light thrown on the therapeutics of diseases of the cerebro-spinal system, by the recent experiments of Brown-Séquard, will enable us to treat the disease understandingly, and with hope of benefit.

The work closes with a history of human horns, from A.D. 1590 to A.D. 1869, and a biography, which shows how extensive have been the researches of the author.

We commend the book to all interested in these subjects, as an honest exposition of the best views. The style is clear and

beautifully concise. The publishers have done their part, also, to make the book a credit to any library. The beautiful paper, clear type, and wide margin give the eye satisfaction in its perusal.

We shall look with interest for the succeeding works.

H.P.M.

The Membrana Tympani in Health and Disease. Illustrated by 24 chromo-lithographs. Clinical Contributions to the Diagnosis and Treatment of Diseases of the Ear, with Supplement. By Dr. ADAM POLITZER, of the University of Vienna. Translated by A. MATHEWSON, M.D., and H. G. NEWTON, M.D., Assistant-Surgeons of the Brooklyn Eye and Ear Hospital; Members of the Amer. Ophthalmological and Otol. Society. New York: WM. WOOD & Co., 61 Walker Street 1869.

This is a volume of 183 pages, octavo, neatly bound, printed on good type and paper, with beautiful illustrations. The subject of which it treats is a very important one, yet but little understood by the general practitioner. We commend the work as one of real practical value. Price $2.50.

The Science and Art of Surgery; being a Treatise on Surgical Injuries, Diseases, and Operations. By JOHN ERIC ERICHSEN, Senior Surgeon to University College Hospital, and Holme Professor of Clinical Surgery in University College, London. From the fifth enlarged and carefully revised London edition. Illustrated with 630 engravings on wood. With additions. By JOHN ASHHURST, JR., A.M., M.D., Vice-President of the Philadelphia Pathological Society; Fellow of the College of Physicians; Member of the Academy of Natural Sciences; Surgeon to the Episcopal Hospital, etc., etc. Philadelphia: HENRY C. LEA. 1869.

This is a large-sized octavo volume of 1228 printed pages; and, as its title-page imports, it is a thoroughly revised and enlarged edition of Erichsen's well-known work on surgery. The high reputation gained by former editions will be increased

by this. It is a good, practical work, both for study and reference. Price, bound in cloth $7.50, in sheep $8.50. For sale by S. C. Griggs & Co., 117 and 119 State Street, Chicago.

A Guide-Book of Florida and the South, for Tourists, Invalids, and Emigrants, with a Map of the St. John River. By DANIEL G. BRINTON, A.M., M.D. Philadelphia: GEORGE MACLEAN, 719 Sansom Street. 1869.

This is a duodecimo volume of 136 pages, written in a pleasant style, and presenting a great variety of very valuable information, for the use of such as desire to visit the South, and especially Florida. It is also a very useful volume for physicians who wish to be prepared to give proper directions to such of their patients as may wish to resort to Florida, for the improvement of health. Aside from a slight commendation of the use of alcoholic liquors, in the last section, that we wish the author had omitted, we freely recommend the work, both to the profession and the public. Price $1.

Editorial.

FEMALE STUDENTS AND PHYSICIANS.—A recent letter from a correspondent in Europe closes with the following report from the *Gazette de Hospiteau*:—"Decidedly, the medical profession in France can no longer be considered the exclusive property of the male sex. Among the students who have passed the most brilliantly their examinations to the Faculty of Medicine are included three ladies—one French, one Russian, and one American. The latter has proved herself to possess a solid knowledge of anatomy, and dissections, pathology, and operative surgery."

It thus appears, that female students have not only gained admittance to the best hospitals and medical schools of Europe, for instruction, but they have finally been admitted to regular examinations and graduation, by the highest medical tribunal in France.

Is it not time that the position of female medical students should be more definitely settled in this country? At present, they are admitted freely to clinical instruction in the hospitals of most of our large cities, but are denied admission into the colleges, or to become regular candidates for graduation. If, in despite of the latter obstacle, one of them persists, until she finally gets a degree, from some school in this country or Europe, she is freely recognized in practice, and consulted with by members of the profession of the highest standing; and if she can get a hospital or infirmary for the treatment of women and children started, any number of respectable physicians are ready to lend their names to make up the usual list of *consulting* physicians, surgeons, obstetricians, etc. Now, if it is right thus to admit them to clinical instruction, in hospitals, consult with them in private practice, and associate our names with theirs, as attendants on public institutions, where is the consistency or propriety of shutting them out of the colleges? Certainly, there is no more indelicacy in mingling the sexes in the lecture room of a college than around the operating table of a public hospital. We are not disposed to encourage women to study medicine, simply because its practice is not a business suited to her nature, or which she can follow successfully, without ignoring some of the most important objects of her own creation. To do the work of a general practitioner, she must be ready in the darkness of night, as well as at noonday; in storm as well as sunshine—at all hours, to ride over the country, or traverse the streets or alleys of cities, all of which she cannot do without stultifying her own social instincts, and avoiding the performing of some of the highest duties required of her by her Creator. And, yet, it is doubtless true, that there is now, and always will be, a very few females who are so constituted, mentally and physically, that they will exhibit a persistent disposition to study and practise medicine. These, if well educated, could be made very useful members of the profession, and find honorable and remunerative employment in the practise of special departments of the profession, in our more populous cities. Hence, we think, it would be much better, if the

medical colleges should open their doors to them, and give them the same opportunities, and hold them to the same full requirements as the other sex.

CHICAGO MEDICAL COLLEGE—MEDICAL DEPARTMENT OF THE NORTH-WESTERN UNIVERSITY.—The next annual course of instruction in this institution commences on Monday, the 4th day of October. The general introductory lecture will be given in the College Hall, on Monday evening, by H. W. Boyd, M.D., Professor of Descriptive Anatomy.

We feel no hesitation in saying, that the student of medicine, who is earnestly desirous of thoroughly educating himself in all the departments of medical science and practise, can find no college in this country more complete in its arrangements, more comprehensive in its curriculum, or more reliable in the faithful execution of what it promises, than this. There is already a good class attending the clinical instruction in Mercy Hospital, the new building for which is rapidly approaching completion.

ARCHIVES DE PHYSIOLOGIE NORMALE ET PATHOLOGIQUE. PUBLIEES PAR MM. BROWN-SEQUARD, CHARCOT, VULPIAN.—The number of this very valuable French journal for September and October is promptly on table. Its contents are varied and highly interesting.

PHARMACIST.—We have received the September number of the *Pharmacist and Chemical Record* of this city, containing the proceedings of the recent National Pharmaceutical Convention, but too late to enable us to notice its contents in this number. We were absent from the city during the sessions of the Convention, or we should have been happy to have personally witnessed its proceedings.

CANADIAN MEDICAL ASSOCIATION.—The second annual session of this Association was recently held in Toronto. We enjoyed the pleasure of attending its sessions, and forming the personal acquaintance of many of its members. We had prepared an abstract of such part of its proceedings as would interest our readers, but want of space will compel us to postpone its insertion until our next number.

Mortality for the Month of August, 1869:—

Accident, drowned	14	Dysentery	38	Meningitis, tubercular,	2
" burns, kerosene	4	" chronic	1	Manslaughter	3
" by fall	4	" typhoid	2	Neuralgia	1
" railroad	3	Encephalitis	5	Old age	6
" run over by wagon	2	Endo-carditis	1	Otitis	1
Anasarca	1	Entero-colitis	5	Paralysis	4
" and fever scarlet	1	Enteritis	12	Peritonitis	3
Apoplexy	4	Epilepsy	1	" puerperal	3
Ascitis and enlargement of liver	1	Exhaustion	1	Phrenitis	1
Asthma	2	Erysipelas	1	Pleurisy	3
" and consumption	1	Fever, congestive	1	Pneumonia	9
Births, premature	26	" puerperal	7	" typhoid	1
" still	47	" scarlet	53	Poisoned, unknown	1
" tedious	2	" " malignant,	3	Pyæmia	1
Bowels, inflammation,	4	" typhoid	19	" from complicat'd fracture of leg	1
Brain, congestion of	8	" typhus	2	Rheumatism, cardiac	1
" compression of,	1	Gastritis	3	Scrofula	3
" disease of	3	Gastro-enteritis	4	" of hip joint and gastritis	1
" inflammation	6	Hemorrhage, internal,	1	" of intestines	1
" malformation	1	Heart, disease of	3	Small-pox	1
" softening of	1	" organic disease of	1	Septæmia	1
Cachexia, malarial	1	" valvular "	2	Spine, fracture of	1
Cancer of superior maxillary bone	1	" fatty degeneration of	1	Syphilis	1
Childbirth	1	Hemipligia	2	Stomach, cancer of	2
Cholera infantum	328	Hepatitis, acute	2	" hemorrhage of	1
Cholera morbus	7	Hernia, umbilical	1	" scirrhosis of	1
Convulsions	86	Hydrocephalus	17	Sun-stroke	3
Consumption	40	" acute	7	Suicide	7
Convulsions, puerperal	5	Inanition	10	Tabes mesenterica,	39
Croup	8	" and diarrhœa	1	Teething	26
" diphtheretic	1	Intestinal obstructions	1	" and convulsions,	6
" membranous	2	Jaundice	1	Throat, ulcerated sore,	1
Cyanosis	1	Kidneys, Bright's dis.	1	" putrid sore	1
Debility	3	Liver, atrophy of	1	Uremia	1
" general	1	" disease of	1	Vitality, deficient	1
Delirium tremens	1	" abscess of	1	Whooping-cough	24
Diarrhœa	81	" inflammation of,	1	" and teething	1
" chronic	4	Lungs, con estion of	2	Womb, contraction of,	1
" whooping-cough	2	Mouth, canker sore	1	" inflammation of,	1
Diphtheria	12	Measles	15	Wound to foot from fall	1
Dropsy	3	" and diarrhœa	1		
		" and teething	2		
		Meningitis	12		
		" cerebro-spinal,	7	Total	1070

Comparison.

Deaths in Aug., 1869, 1070 | Deaths in Aug., 1868, 945 | Increase, 125
Deaths in July, 1869, 815 | Increase, 255

Ages.

Under 1	488	30 to 40	45	80 to 90	2
1 to 3	313	40 to 50	31	90 to 100	1
3 to 5	44	50 to 50	21	Unknown	1
5 to 10	25	60 to 70	14		
10 to 20	24	70 to 80	8	Total,	1070
20 to 30	53				

Males, ----------548	Females, ----------522	Total, --------1070
Single, ----------950	Married ----------120	Total, --------1070
White, ----------1062	Colored, ---------- 8	Total, --------1070

NATIVITY.

Austria----------	1	Denmark, ---------	2	Poland----------	1
Atlantic Ocean-----	3	England, ---------	8	Scotland, ---------	5
Bohemia, ---------	7	France,----------	1	Sweden, ----------	29
Bavaria ----------	1	Germany,---------	75	Wales----------	3
Canada, ----------	10	Holland----------	5	Unknown, ---------	4
Chicago, Native,----	197	Ireland, ---------	41		
Chicago, Foreign,---	549	Italy----------	1	Total, ----------1070	
U. S., other parts,---	109	Norway, ---------	18		

MORTALITY BY WARDS FOR THE MONTH.

Wards.	Mortality.	Pop. in 1868.	One death in	Mortality.	
1---	16	9,094	568½	Accidents,----------	27
2---	18	13,074	726⅓	Bridewell ----------	1
3---	39	15,076	384	County Hospital, ----------	21
4---	62	17,796	287	Home for Friendless, ----------	6
5---	95	16,033	168 7-9	Immigrants,----------	32
6---	64	13,083	204½	Jewish Hospital,----------	1
7---	104	25,492	245 1-9	Mercy Hospital, ----------	1
8---	103	15,813	153½	Marine Hospital,----------	2
9---	53	19,297	364 1-10	Manslaughter, ----------	3
10---	24	12,925	538½	Protestant Orphan Asylum, ------	1
11---	29	14,340	494½	St. Joseph Orphan Asylum,-------	7
12---	135	17,485	129½	Poisoned, unknown ----------	1
13---	55	11,164	203	Convent of Good Shepards ------	1
14---	62	14,839	239⅓	Suicide,----------	7
15---	58	21,078	363 3-7		
16---	42	15,465	368 1-5	Total,----------1070	

RESOLUTIONS OF RESPECT UPON THE DEATH OF DR. F. O. EARLE.— *Whereas*, the Chicago Medical Society has been deprived of one of its members, by the death of Dr. F. O. EARLE.

Resolved, that we lament his loss. Although he had been with us but a brief time, we had learned to respect him for his gentlemanly deportment and professional ability. Although quite young in the profession, he had given promise of more than ordinary ability, and could look forward to a noble and useful future in the profession of his choice. We cannot but feel that the close application and devotion to the labor of the profession, during his stay among us, had much to do in determining his early death, which seemed too soon. The profession has lost an earnest worker. To his family and relatives we may be permitted to express our sincere sympathy.

Resolved, that a copy of these be sent to the family, and that they be published in the medical journals of this city, and in the *Medical Record* of New York.

R. G. BOGUE, M.D.
T. D. FITCH, M.D.
A. H. FOSTER, M.D.

Miami Medical College of Cincinnati.

TENTH ANNUAL ANNOUNCEMENT.

THE next Regular Course of Lectures in this Institution will commence on Tuesday, October 5th, 1869.

FACULTY:

GEORGE MENDENHALL, M.D.—Obstetrics.
B. F. RICHARDSON, M.D.—Diseases of Women and Children.
WM. CLENDENIN, M.D.—Descriptive and Surgical Anatomy.
JOHN A. MURPHY, M.D.—Principles and Practice of Medicine.
W. H. MUSSEY, M.D.—Descriptive and Operative Surgery.
H. E. FOOTE, M.D.—Principles of Surgery and Special Pathology.
E. WILLIAMS, M.D.—Ophthalmology and Aural Surgery.
E. B. STEVENS, M.D.—Materia Medica and Therapeutics.
W. H. TAYLOR, M.D.—Physiology, Pathology, and Morbid Anatomy.
S. A. NORTON, M.D.—Chemistry and Toxicology.
C. P. JUDKINS, M.D. and W. K. PERRINE, M.D.—Demonstrators of Anatomy.
C. P. DIVAN, M.D.—Assistant to Chair of Chemistry.

FEES.

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GEORGE MENDENHALL, M.D., Dean,
or E. B. STEVENS, M.D., Secretary.

UNIVERSITY OF LOUISVILLE,

MEDICAL DEPARTMENT.

33d ANNUAL SESSION.

FACULTY.

G. W. BAYLESS, M.D., Professor of the Principles and Practice of Surgery.
J. MORRIE BODINE. M.D., Professor of Anatomy and Dean of the Faculty.
L. P. YANDELL, Jr., M.D., Professor of Materia Medica and Clinical Medicine.
E. R. PALMER, M.D., Professor of Physiology and Histology.
T. S. BELL, M.D., Professor of the Science and Practice of Medicine and Public Hygiene.
JNO. E. CROWE, M.D., Professor of Obstetrics.
J. W. HOLLAND, M.D., Professor of Medical Chemistry and Toxicology.
D. W. YANDELL, M.D., Professor of Clinical Surgery.
THEOPHILUS PARVIN, M.D., Professor of the Medical and Surgical Diseases of Women.
R. O. COWLING. M.D., Demonstrator of Anatomy and Assistant to the Chair of the Principles and Practice of Surgery.
W. WALLING, M.D. and R. H. SINGLETON, M.D., Assistant Demonstrators of Anatomy.
JAMES McCARTHY, M.D., Prosector to the Chair of Anatomy.

The next Regular Session will commence on the first Monday in October, and continue until the first of March.

A Preliminary Course of Lectures, Didactic and Clinical, will commence on the second Monday in September, and continue until the Regular Session begins.

FEES.

Professors' Tickets, in full,	$50 00
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WM. B. FLETCHER, M.D., Professor of Physiology.
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W. H. BYFORD, M.D., TREASURER OF FACULTY,
Professor of Obstetrics and Diseases of Women and Children.

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Demonstrator of Anatomy.

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Assistant to Professor of Surgical Anatomy and Operative Surgery.

JULIEN S. SHERMAN, M.D.,
Lecturer on Orthopedic Surg'y and Asst. to Prof. of Prin. & Prac. of Surg'y.

NORMAN BRIDGE, M.D.,
Assistant to the Chair of Descriptive Anatomy.

FEES.

For the Winter Term, admitting to all the Lectures in the College,	$50 00
Graduation Fee,	20 00
Matriculation Fee,	5.00
Dissecting Ticket,	5.00
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The Summer Reading and Clinical Term commences on the first Monday in April, and continues until the first Monday in July; and is free to all matriculated Students of the College. Boarding, $3.50 to $4.50 per week. For further information, address

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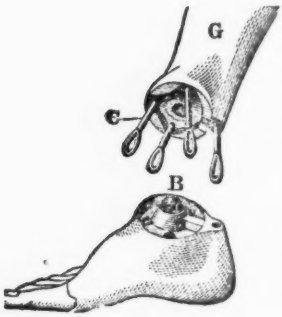

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